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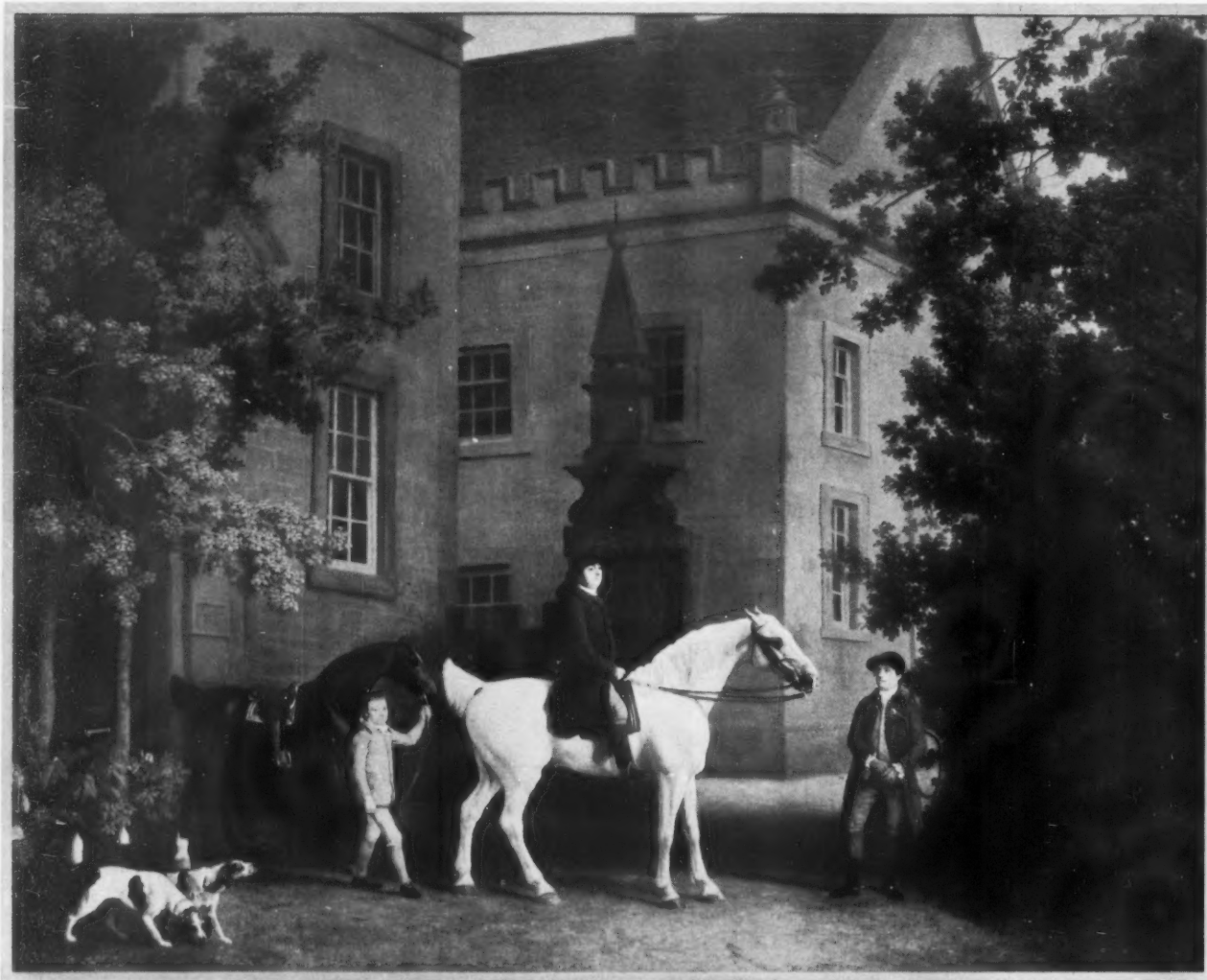
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THE THIRD DUKE OF PORTLAND

ON A WHITE HORSE (1767)

PAINTED BY GEORGE STUBBS (1724-1806)

This is one of the outstanding pictures in the Exhibition of British Art at Burlington House. Beside the Flemish or the Italians, Watteau or Degas, it would not have been noticed, yet the portrait reveals the strength as well as the weakness of the Exhibition—since few would look at it if simply called "The Man on the White Horse." For British art, like King David, a little feeble on the creative side, had the sense to take to bed the warm young body of the whig aristocracy. In fact most people could not name a single English-born painter before Hogarth. English painting was not a robust tree but the mistletoe hanging from the oak of landed society. The Royal Academy, largely founded to free the artist from patronage and the continuous delineation of ducal nurseries and stables, consequently at once began to destroy all that was intimate, charming and spontaneous—in fact, all that was English—in its protégée.

The early Gainsboroughs seduce utterly, and so do the conversation pictures, Hogarth's child actors, Nolleken's musicians and all the products of Zoffany's watery muse. How original and delicious, how, but for Reynolds, unacademic, English painting might still be!

What these artists found in suburbs and city Stubbs discovered in the countryside. He alone of the sporting painters brings out in the landscape a corresponding *douceur de vivre*. The picture reproduced shows the third duke (who was twice prime minister) on a white horse outside the riding school at Welbeck. The canvas has the luminous quality of Stubbs's early pictures, as of a rustic earth-stopping Claude. Here the English summer seems rather oppressive, heavily hangs the hollyhock, with almost pre-Raphaelite detail, yet the landscape is quite subjected; even the sunshine seems there to provide the Duke with a minor pleasure. One should compare it with his other fine portrait of the Duke and his brother as boys in green coats judging a mettlesome colt in a still greener pasture, or with that of Colonel Pocklington and his sisters. Yet there lingers a touch of comedy in these pictures, Colonel Pocklington is rather ridiculous standing in front of his private ocean and even the Duke of Portland looks stoutly epicene. The conversation picture, never far away from caricature, remains the prevailing genre. It is after 1770 when the Academy is founded, and Stubbs and Gainsborough are prominent R.A.'s that the grand style really comes to stay. And how grand, how distressingly mag-

nificent it is! These Gainsboroughs and Reynoldses, Hoppners and Romneys, portray a world where there is too much rank and too much money. Like Thackeray, one would rather be with Gray at Cambridge or Johnson at the Club than with these fine people, and now that, unlike their grandfathers, they are separated from the literary world one begins to suspect that they were also terribly dull. The boredom of gossiping and dressing up or playing loo with the women or trudging over interminable fields with the men! Who wants to join "The Booth family in the billiard room at Twemlow" or "Sir John Nelthorpe, 6th baronet, partridge shooting with two pointers"? Even for Stubbs himself the countryside has lost its lustre. As we go on past the turn of the century the dullness, the stifling pomp of these landowners enlarge like their own waistbands. How arrogant and philistine seem the swells of the Melton Breakfast, how necessary the Reform Bill to let a little of that blood! But by then the Academy had done its work. Though a genuine love of form and beauty breaks through in Etty, Sir Isambard is at the Ford, and if Constable, Turner and Bonington find their imitators, they find them in France.

CYRIL CONNOLLY

February 1934

Can Britain Lead?

By SIR STEPHEN TALLENTS

THE appointment by the President of the Board of Trade of a new Council for Art and Industry has created much interest, has encouraged all those who appreciate what a marriage of art and industry might come to mean, and should in due time be fruitful of results. We have suffered too long from a system, or a lack of system, which has imprisoned the eyes of our industries within the walls of their factories and allowed or compelled our artists to be content with fishing for fancies behind the windows of their own studios or in the coves of their favourite seaside resorts. The new Council, let us hope, will effect a dissolution of our industrial monasteries and our artistic nunneries alike.

This new development is promising from several points of view. In the first place, it is a true development and not a mere adventure. For years the Design and Industries Association and the British Institute of Industrial Art have been gallantly working and preaching—one might almost say hunger-marching—in this cause. To those two bodies must belong much of the credit for this latest move, and it is good to find that their respective protagonists, Mr. Frank Pick and Sir Hubert Llewellyn Smith, are both included in the new body. The wind of true doctrine has long been astir in the Department of Overseas Trade, out of which at length came the Gorell Committee; and that Committee's report, fostered by the personal energy of Lord Gorell and others, had much to do with the begetting of the Dorland House Exhibition, which showed that more was already being done in the application of design to industry than most of us had suspected. So, too, last year's admirable series of B.B.C. talks on Design in Modern Life did much to create and guide public opinion. The B.B.C. leaflet, incidentally, in which the synopsis of those talks was published, was itself a very valuable contribution to the good cause. The new Council, therefore, starts with an adequate background. It starts also with a remarkable opportunity for the demonstration of its ideas immediately ahead of it in the Exhibition of British Art in Industry which is to occupy Burlington House in a year's time. From every point of view it is fortunate in the hour of its nativity.

It also starts, I believe, on a wise model. The problem looms large. The range defies any satisfactory advance definition. The President of the Board of Trade it would seem has resisted the temptation to create a new machine, and to talk about the co-ordination of existing agencies around it. He has declined in other words to be intimidated by the mechanical conception which sterilizes so many official and public activities. He has preferred to gather round one table a group of men of very diverse abilities and qualifications, and to toss the problem into their midst without attempting to tell them in advance whither it leads or what they are to do about it. This is a fruitful

technique of Government procedure, and one that is all too rarely adopted.

There is no need here to analyse the constituents of the new Council, or to recite the qualifications of its members. It is, however, interesting to consider how clearly the composition of the new Council reflects the recent changes in our social conditions and in the public approach to industrial art. The day is not so long past when any official body of comparable authority, appointed to deal with a national artistic problem, would have consisted of a mixture of noble patrons of the arts and painters accustomed to execute none but private commissions. The possibilities of combining art with industry would scarcely have been sought outside the arts and crafts. Behind the new Council of today stand the art patrons of our time—the great corporations and businesses which alone are in a position to commission worthily the artists of our generation. It is no mere accident of private inclination which has placed Mr. Pick, with his outstanding record of results in this field, in the chair of the new Council, and brought the representatives of great businesses, including Messrs. Woolworths and the Co-operative Wholesale Society, to his support. It is again no accident that has enlisted with them Mr. McKnight Kauffer and Mr. Paul Nash—both artists of the first repute, who have not disdained to do pioneer work in the industrial field. Perhaps the most valid criticism of the Council's membership is that only one of its twenty-seven members is a woman. Has Mr. Runciman been recalling that witty and provocative essay—"The Pompadour in Art"—in which Clutton Brock traced back the modern demand for excessive machine-made ornaments to the Court of Louis XV, whose mistress "liked everything about her to be ornamented, because it was a point of honour with her to advertise the King's devotion to her in the costliness of all her surroundings." It had been, Clutton Brock maintained, one of the triumphs of modern industry to provide excellent mothers of families with cheap imitations of the luxury of the Pompadour which could be interpreted as an expression of their husbands' devotion. "Hence the machine-made frivolities of the most respectable homes, the hair-brushes with backs of stamped silver, the scent bottles of imitation cut-glass, the draperies with printed rose-buds on them, the general artificial floweriness and flimsiness and superfluity of naughtiness of our domestic art." Certainly, if there be danger in woman's influence, the new Council will be unusually secure. But there will remain those who have preferred to see the Board of Trade a trifle more ready to run the risk.

A few critics of the new Council have made much of the fact that no funds have been placed at its disposal. I see no reason to be despondent on that account. Its field is one in which vast sums are already being expended year

by year—the whole field of British industrial production and distribution. The Council may find it desirable to make an occasional pioneer experiment of its own. In the main it may well be content to influence the minds and eyes of those who control the existing resources of industry, and of those whose custom calls the tune in their application.

They will also, I hope, persecute by word and deed some of the heresies which have grown up about their subject. We are told that our people, as compared with foreigners, have no native instinct for design. Might not the Commission draw up a programme of visits to our national collections and our modern Art schools for the conversion of those upon whose minds this heresy has prevailed. We are led to believe that our manufacturers are somehow more backward than other sections of the community. Let those who harbour this suspicion at least reflect that the manufacturer's products are exposed more widely than the products of most of us. They come before the public in the shop window and on the counter; there can be little mystery about them. If some means could be devised for displaying behind plate glass the fruits, for example, of the daily work of our doctors or accountants or civil servants—dare one even suggest also of our Cabinet Ministers—would the comparison be so inevitably to the detriment of the manufacturer? And, if they were, would not the manufacturer and the public have to share the blame? Well-designed manufactures are, after all, not so rare in England. Within my reach, as I write this article, I find a telephone instrument, a fountain pen an inkstand, a cigarette carton and a newspaper, all of native, recent and admirable design. Our motor cars and aeroplanes, including very notably our aero-engines, are many of them beautiful to see. Those who doubt that craftsmanship still resides in our industry, or that beauty still issues from it, might with advantage view the film "Industrial Britain," which Messrs. Flaherty and Grierson made for the Empire Marketing Board, and which the Gaumont-British group with excellent taste purchased and are showing, as I write these lines, in a West End picture house. They should visit some of our best recent buildings, study our latest operating theatres and telephone switchboards, and stare into some of the delightful shop window displays which are now to be found in the streets of our great cities. If there is no room for complacency, there are yet signs of encouragement; and there is no reason why the generation that is now in control of our fortunes should not see, before it dies, an immense improvement in the industrial design of Great Britain. But that, like any other revolution, will demand the exercise of energy, and, like all beneficent revolutions, a heightened exercise of pains and thought.

Here, after all, is one of the most attractive features of the Commission's task. Our generation is suffering from an over-production of problems. Some of these seem quite insoluble, at any rate in our own time; for their solution seems to postulate a change of heart in all the great nations of the world. Others, though it is not beyond our power as a nation to control their solution, either demand resources, which we cannot expect to make available, or are so technical that only a few esoteric specialists can hope to master them or guide their solution. Here, in the application of design to British industry, is a problem which as a nation we can

perfectly well solve for ourselves; which demands the application not of great financial resources but of the yet more potent resources of intelligence, taste and good will, and in the solution of which almost every man, woman and child can take not only an interest but a practical part. In the world of 1934, which poses far more problems than we can hope to solve or even to understand, that is the type of problem which seems worth singling out for concentrated attack. It is a problem, too, however little this is generally recognized, of high practical importance, the solution of which will not merely add to the intangible amenities of the daily life of us all, but can be counted upon to secure tangible national rewards.

For design is a great power. We are groping after it in our social affairs. The abundant talk of the need for planning is fundamentally a demand that artistic design should be introduced into our ways of national living. Design speaks an international language. It is the best of interpreters and the most powerful of ambassadors. What envoy could have done for the repute of Finland what the design of Helsingfors station has done? What ambassador could have done as much for the fame of Sweden and of Denmark as the glass of Orrefors and Jensen's silver? What diplomatic negotiations could have secured the safe conduct of that silver and that glass across the tariff frontiers of Europe and America so successfully as their own inherent beauty of design? Nor does the influence of design fall out of date. Unlike scientific discoveries, which are superseded by their successors; unlike mechanical inventions which are quickly scrapped and replaced, the quality of artistic design persists, as anyone may see for himself by visiting, for example, the Ceramics Department of the Victoria and Albert Museum and comparing the ancient Korean pottery there displayed with its successors through the centuries. Those who work for the improvement of national design are working for high and enduring rewards.

The new Commission starts happily unembarrassed by precise terms of reference or any detailed programme. Let no one seek in advance to impair that singularly fortunate state. Its members can muster among them collectively enough brains and taste and influence to change the looks of every shop window in Britain and the shape of every cargo of manufactures that sails out of British ports.

Mr. Runciman has given them a notable platform and, in Major Longden, a Secretary to whom British industry already owes much. We may hope that they will first fuse their widely divergent qualities into a group consciousness and then be active, through all the modern media of communication, to rouse behind the eighty million eyes of their fellow countrymen that "poignant sense of the appropriate," which is taste. I sometimes amuse myself by framing two mutually exclusive lists. The first is a list of those desirable things which, as Mr. Punch would say, we can never hope to see. It includes many of those causes which today take the chief places at the feasts and the conferences and in the newspapers. The second is a list of the things that I hope to see accomplished before I die. It includes the achievement by England, in the old world and the new, of an honourable and acknowledged supremacy in industrial design. I look hopefully to the new Commission to justify that item in my forecast.

THE ONE-ROOM FLAT

NOTE BY
SIR GEORGE BROADBRIDGE.

The coming of the one-room flat is only one of the signs of a growing discontent with the obsolescent homes of today. People who, twenty years ago, were content to live in old-fashioned, tumble-down houses, in a good many cases with basements badly lighted, and sadly lacking in fresh air, are willing to do so no longer. They are demanding that new structures should take the place of the old, modern in idea and thoroughly up-to-date in planning and equipment.

It is perfectly easy to ascertain what are the causes of this changed point of view. First, there is the motor-car and coach, which have taken people out into the country and the open air. Broadcasting is another important factor. People have listened to lectures and talks upon health, housing, slum-clearance and suchlike. The radio has now become almost a sort of continuous Night School—from which people are learning a great deal about the amenities of life and the elements of human well-being. Discontent has also been bred by the moving pictures. It is difficult to look at the attractive and up-to-date homes represented on the screen without feeling a desire for better surroundings in one's own daily existence.

In this widespread and not, as yet, very articulate movement, the one-room flat may be said to occupy a spear-head position. No



1



2

Two different treatments for balconies. 1: A BLOCK OF FLATS IN BRESLAU with five tiers of cantilevered balconies, by Hans Scharoun; 2: A FIVE-STORIED BLOCK IN BERLIN, by Rudolf Fränkel, in which the balconies are recessed behind the façade. The nautical appearance of the former is very marked, the rounded balcony ends being curved back to meet the side elevation as in the navigation bridge of a liner. The tidy panels of metal mesh between the parapet rails is a feature that might well be emulated in this country. Though the recessed balcony is doubtless an ideal type for hot climates, where shade from the sun is a paramount consideration, there are far more days in the year in northern latitudes when this perhaps neater solution of the problem inevitably darkens that part of the room lit by a recessed window.

Curiously enough both blocks have a deep overhanging roof cornice.

THE ONE-ROOM FLAT

class of town-dweller is worse served today than the bachelor men and women who are living "on their own." For some time past there has been provided in the West End and Kensington districts, bed-sitting rooms, furnished, which are sometimes termed "furnished flatlets." Though they may make comfortable homes of a sort, they cannot, of course, be compared with a genuine flat. As a rule, there are no separate self-contained bath or lavatory arrangements, the bathroom being a communal one on each floor. And one's own bath, self-contained in one's own home, is rapidly becoming a necessity of ordinary civilized life. Even hotels are finding that bedrooms without their private bathrooms must mean a rapidly dwindling clientele.

The typical modern one-room flat has a bed recess large enough to place a decent-sized bed or bed-settee. Curtains are drawn across the recess during the day-time. The room is centrally heated, so that there are no fires to trouble

about; but supplementary gas or electric heating is usually installed. There is an entirely separate bathroom with w.c. and lavatory basin with hot and cold water supply. Then there is a separate kitchenette with sink, draining board, larders, etc., and gas cooking stove, and here again the sink is provided with hot and cold water, the whole of these amenities being self-contained.

But the amenities should not stop here. There are outdoor and physical exercises to be looked after. A recent block of one-room flats at Brixton Hill has a swimming pool with high diving and spring boards in the middle of the quadrangle. Of course, filtration plant with fountain has been installed, so that the water may be certain of being kept constantly pure. Hard tennis courts are an equally important adjunct to flat amenities today.

[Readers of the REVIEW may like to compare the illustrations which follow with those taken from Cornelius Meyer's book, dated 1684, in the issue for December 1932, page 285.]

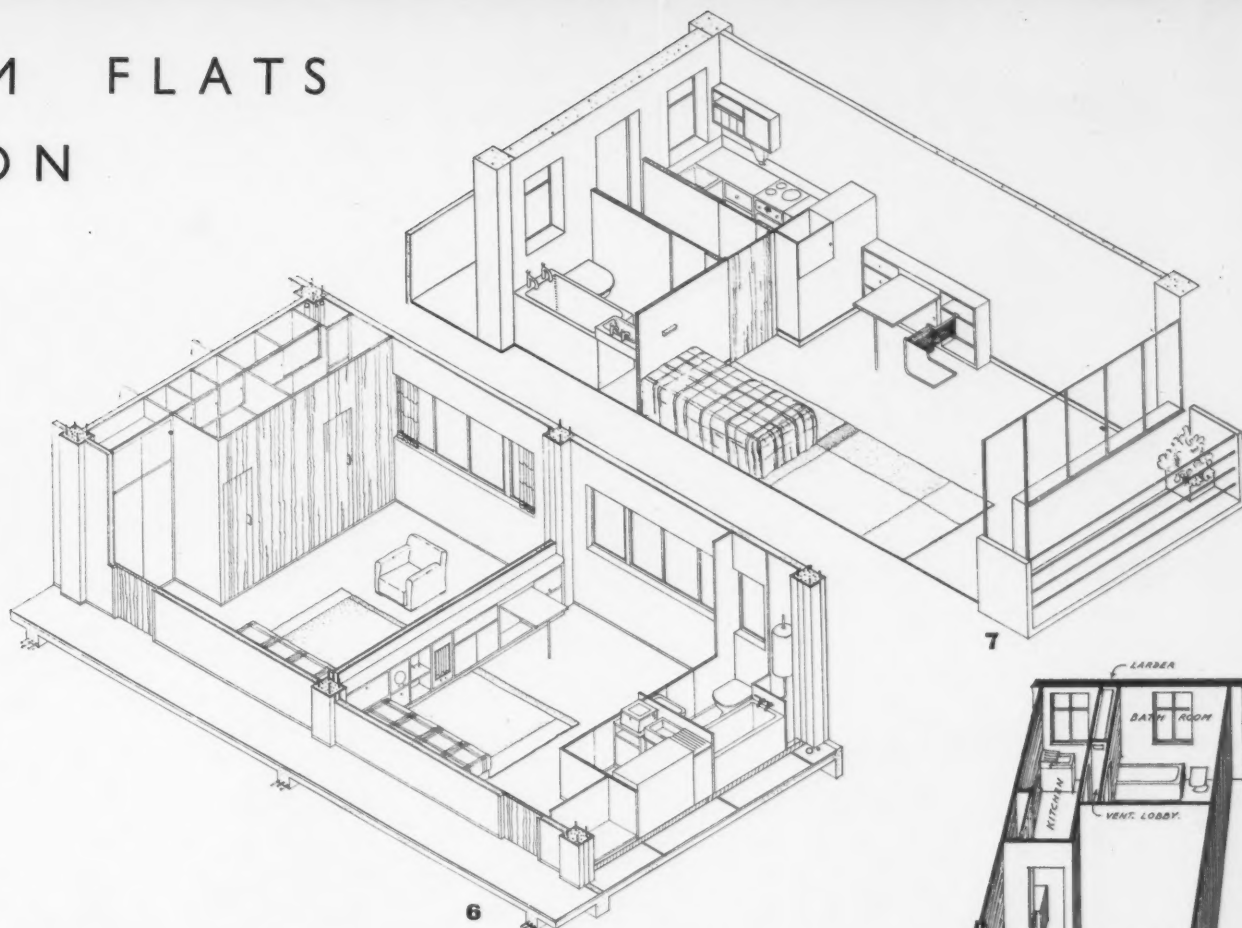


3 and 4: Two views of a typical flat in the block shown in 2. The walls are painted a light yellow, the pile carpet is sand-coloured, and the hangings and coverings are in graduated shades of yellow and brown. The furniture is veneered in dark rosewood, with a reddish shimmer. The electric light and other metal fittings are silvered.

5: A view of another wall of the flat shown in illustration 23, with the writing-table swung out from its recess under the bookshelves.

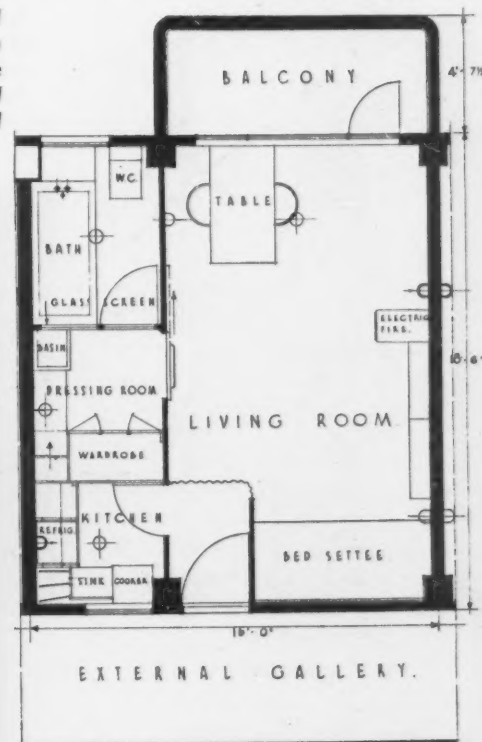
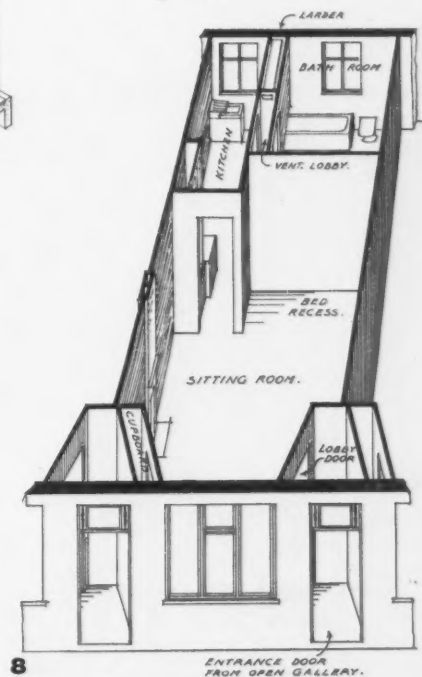
ONE-ROOM FLATS IN LONDON

6. Isometric view of two one-room flats at GREAT ACRE COURT, CLAPHAM, Frederick Gibberd, architect. There are 110 one-room flats, each unit consisting of living space, bathroom, cooking recess and wardrobe. It was decided at the outset that the rental should be at a minimum. With this in view, the scheme was evolved to give the maximum number of flats to the minimum frontage and site area. For this reason every flat is fed from a central corridor running from end to end of the building which in turn is served by an automatic lift. In addition, every flat, being identical, allows for the standardization of all equipment. The working sections of the flats are arranged back to back so that the one-pipe plumbing system, water and other services can be grouped in one common duct. The building is constructed of reinforced concrete and is eight storeys high with a flat roof garden. 7. Isometric view of one-room flats at RELAY HOUSE, STREATHAM, Frederick Gibberd, architect, showing gallery approach, living room, kitchen and bathroom.



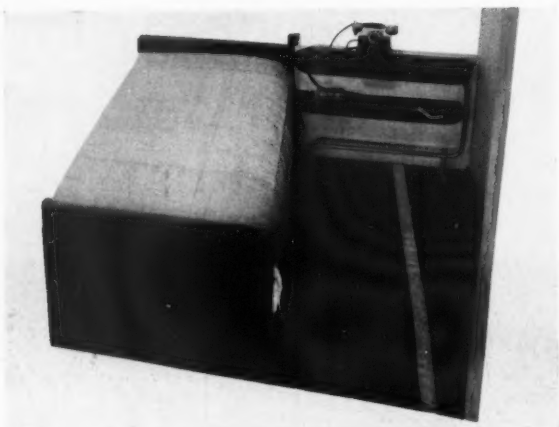
The southern aspect of the living room with wide windows ensures that the maximum amount of sunlight is obtained, while the balcony is provided for use in summer and for growing flowers. The working zone is grouped at the northern side to insulate the living room from cold, at the same time providing the correct aspect for the kitchen. The bathroom, kitchen and living room are fully equipped with built-in furniture. Heating is by hot water radiators supplemented by electric fires, while there is a constant hot water service to kitchen and bathroom. The plumbing is of the one-pipe system and is collected into external ducts on the gallery side. 8. One-room flats at TUDOR CLOSE, BRIXTON HILL, A. W. Reading, architect. This type of flat has to be approached from an open gallery, the sitting-room window being on the same side as the entrance door. At Tudor Close the buildings surround a large courtyard and all the entrances and sitting-room windows face this. The lobbies are placed centrally to the division walls between flats and the lobby doors lead to the sitting-rooms at an angle. Opposite these doors in the sitting-room a cupboard has been built, thus forming a bay in the centre of which there is a large window. The bathroom has been placed behind the bed

recess and leads out of the kitchenette. Between the kitchenette and bathroom there is a small lobby ventilated by means of an air-duct leading over the top of the larder. The latter is in line with this lobby placed against the outer wall. It is raised 4 ft. above the floor. The space underneath forms part of the bathroom and is occupied by the foot of the bath. A great deal of space has thus been saved and both kitchenette and bathroom are quite roomy in spite of the small area allotted to them. 9 and 10. The "minimum" flat at LAWN ROAD FLATS, HAMPSTEAD, Wells Coates, architect. This flat is designed for one person and contains in an over-all floor space of 17 ft. 8 in. by 15 ft. 6 in., a living room with bed-settee in alcove, fitted bookcases, an electric fire and radio set unit, a sliding dining table, a small screened-off lobby; a kitchen (5 ft. by 4 ft. 7 in.) equipped with electric cooker, refrigerator, fitted cupboards, a dressing room equipped with wardrobe, fitted trays, mirrors, a dressing table and lavatory basin with cupboard under; and a bathroom with bath and w.c. There is a glazed screen between the bathroom and the dressing room and a sliding door between the dressing room and the living room. Some of the minimum flats have an external balcony and all are approached from an open gallery.



THE ONE-ROOM FLAT

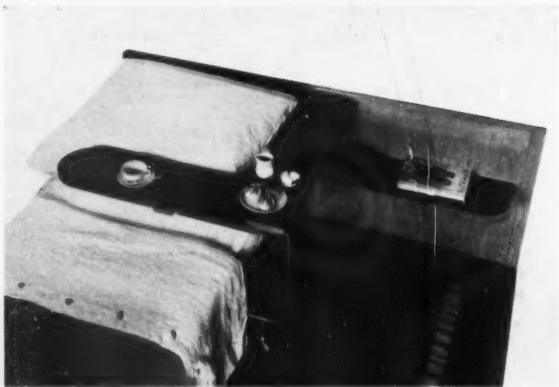
11, 12 and 13 : Bed-alcove in a block of BACHELOR FLATS AT REICHENBERG, CZECHOSLOVAKIA ; Franz Singer, architect. The small bookcase, which forms a structural extension of the bedstead, swings round on a chromium-plated steel bracket for use as a bed-table. The top shelf is of double thickness, and can be unfolded for breakfast in bed, so as to form a flat L-shaped tray stretching across the bed in one direction and parallel to it in the other.



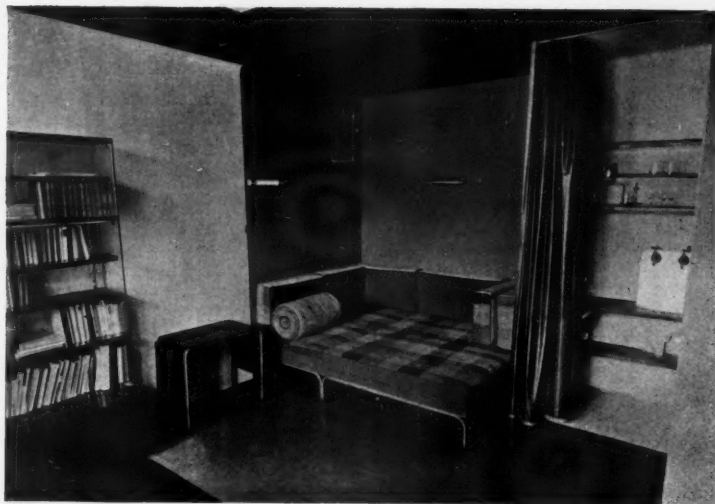
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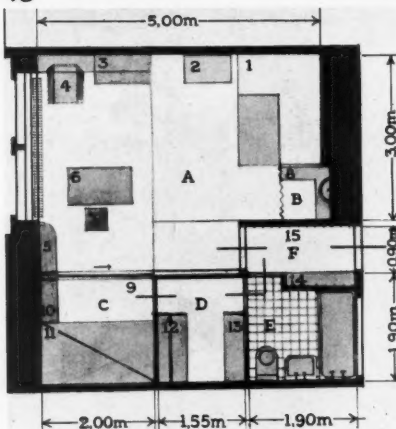
13



14



15



16

edge of the divan being visible on the extreme right. In 17 the working-table is seen folded up; and in 18 opened out on a swinging bracket to provide an additional shelf on a lower level. The small file-rack clamped on to the left-hand corner of the table is a useful little space- and labour-saving fitment.

The key-plan of this room, 16, reads :—

A DIVAN, 14, in the same block of bachelor flats assembled ready for being made up as a bed at night; and 15, the three narrow steel-legged mattress sections, the square wall-cushions and the cylindrical bolster, rearranged so as to form a right-angled "living-room" corner by day. Illustrations 17 and 18 show views of the "study" half of the same room, the

- A. Living, Working and Dining Corner : (1) Divisible couch (2) Folding-table (3) Book-case (4) Arm-chair (5) Filing Cupboard (6) Writing-table (7) Working-chair.
B. Kitchen Alcove : (8) Slab, Crockery-cupboard, and Sink.
C. Sleeping Corner : (9) Sliding Partition (10) Night-table (11) Bed.
D. Cupboard Recess : (12) for Hats, Clothes and Boots (13) for linen.
E. Bathroom.
F. Anteroom : (14) Cupboard for dirty clothes, brooms, etc. (15) Coat-pegs.



17



18

20. A SINGLE-ROOM BACHELOR'S FLAT IN VIENNA; Franz Singer, architect. A set of nesting tables can be seen in the niche. The chairs (which are also nesting and fit into two spaces of the sideboard, one end of which can be seen on the right) have sides, backs and seats of broad, inter-threaded strips of multi-coloured canvas. The cushion of the bedstead, which opens up in two halves to form the bed-ends, is covered in the same way. The floor plan, 19, reads :—

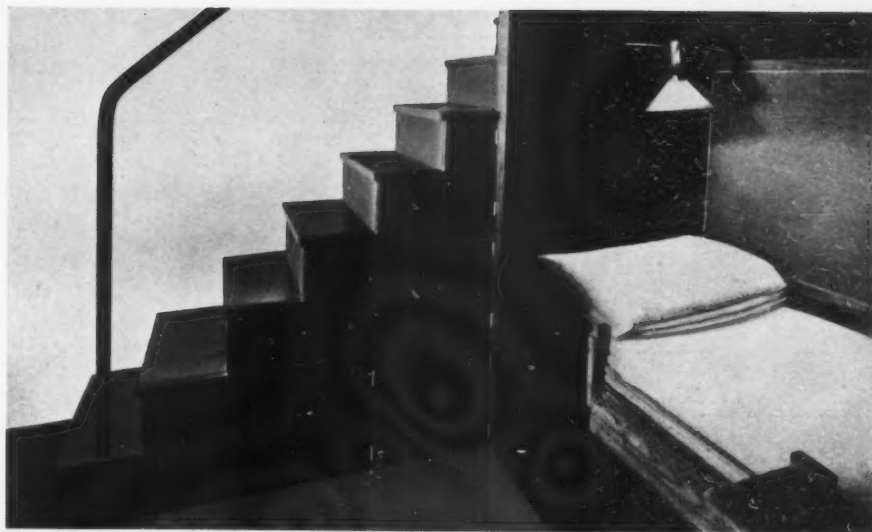
- A. Entrance : (1) Built-in Cupboards (2) Coat-hangers.
B. W.C.
C. Living-Room-Bedroom : (3) Buffet-cupboard with five divisions, into spaces under which two arm-chairs and two stools are stowed away (4)

Three nesting chairs (5) Telephone-bracket (6) Writing-table (7) Working-chair (8) Sofa-bed (9) Four nesting tables (10) Arm-chairs (12) Kitchenette with gas-ring, sink, drying-rack, crockery dresser, etc.

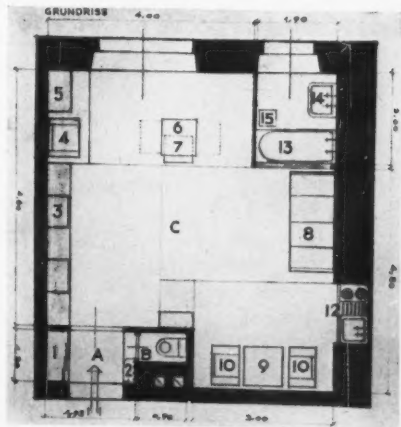
- D. Bathroom : (13) Bath (14) Basin (15) Stool.

21. A STAIRCASE BED-NICHE in another Viennese bachelor flat designed by Franz Singer, with the cavities under the stair-treads utilized for small drawers and cupboards. The floor-plan, 22, reads :—

- A. Living Room-Bedroom : (1) Stairs (2) Cupboard (3) Sofa-bed (4) Book-cases (5) Table (6) Nesting chair and stool.
B. Lavatory and cooking recess : (7) Basin (8) Sink and drying-rack (9) Cooking-space and shelves (10) Mirror.
C. W.C. (11) Broom cupboard.



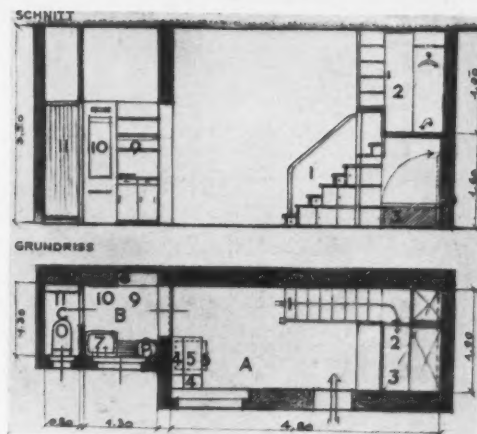
21



19



20



22

THE ONE-ROOM FLAT



23

TWO ONE-ROOM FLATS designed by Kálmán Lengyel, in which the grouping of practical shapes supersedes "decorative arrangement." In the first, 23, there is a curtained-off bedroom alcove; while into the part visible in the illustration both a working-table and a combined dining and sitting corner have been fitted without any suggestion of overcrowding. The side wall consists of built-in fixtures whose varying depths lend a pleasant note of variety. Below is a flat designed for a lady who had been accustomed to a twelve-room house. 24 shows the sofa-bed with a combined night- and breakfast table by its side; which is also intended for use as a step for unhooking dresses from a tall built-in wardrobe at the head of the bed. In 25 a pull-out writing-table can be seen, and the barrier-like buffet separating the dining and living corner from the rest of the room.



24

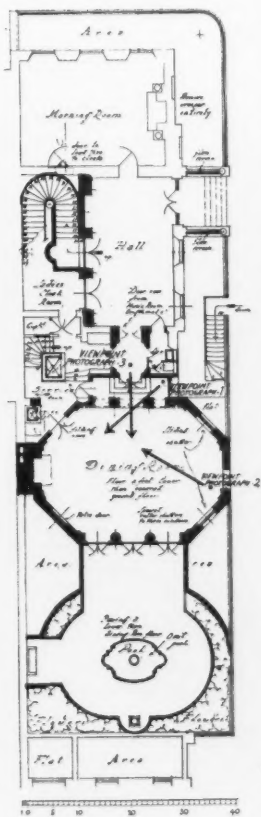


25

GERALD WELLESLEY AND
TRENWITH WILLS, ARCHITECTS

THE NEW DINING ROOM AT FALMOUTH HOUSE, HYDE PARK, LONDON

The work carried out by the architects at Falmouth House for Mildred, Countess of Gosford, included a new kitchen, a new staircase and new bedrooms, besides drastic alteration to the drawing rooms and hall. The only part of the work illustrated here is the dining room. The walls of this room are of plaster painted white and the cornice, pilasters, columns, architraves, etc., are of artificial stone with a rough texture. As this weathers in the atmosphere of London the contrast will become greater. Even now it is more than appears in the illustrations. The floor is of Ancaster stone with small squares of black marble. The fireplace surround is of *bleu belge* marble. The points of view from which the illustrations were taken are indicated by arrow heads on the plan.



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A Retreat House on a Hill

By A. ROSS WILLIAMSON

LAST year with the completion of "Subiaco"—a retreat house of the Oblate Sisters of St. Benedict at Kremsmünster—Herr Hans Steineder definitely proved himself to be one of the most able and most interesting of the younger Austrian architects. His work shows a growing simplicity and power of design which is a welcome reaction from some of even the most famous Austrian buildings, which only too often spoil a first-rate plan by additions of trimmings, of not very successful colour washes, and needless concessions to "Gemütlichkeit." Nor, except perhaps in his first building, does he fall into the opposite German sentimentality of over-emphasising constructional necessities and hoping that beauty will result.

He was born in Linz in 1904, and after studying under Professor Behrens in Vienna, travelling in Germany and Great Britain, it was here that he settled down, though a town which is synonymous with provinciality was hardly the most favourable field for an architect with modern ideas.

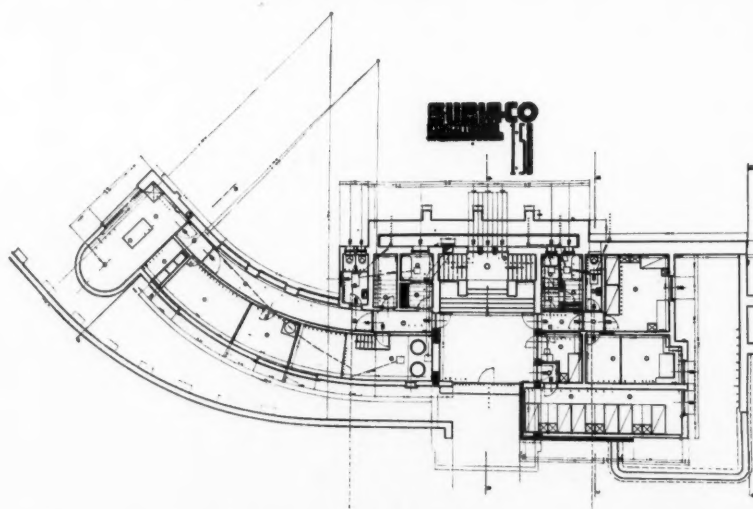
His first building was the Convent School in Linz which was built in 1926. The design showed originality in the treatment of the corner but the clumsy details of the fenestration and of the doorway prevented it being altogether successful.

The next year he had to build a block of six self-contained flats, and the problem of admitting enough light was very ingeniously overcome by the glass shaft which divides the house, thus making it possible to have windows on each of the four sides of every flat. In 1928 the Kolpinghaus—a club house corresponding more or less to the Y.M.C.A.—was built by him in Linz. Here the balconies in a greyish tone with brightly coloured red ceilings made a very striking effect. A second point that is remarkable is the treatment of the service lift. Since it was impossible to conceal this, a bold treatment was decided upon, forming it into a thin ridge running the height of the building and dividing the more elaborate entrance and balconies from the plainer and larger part which contains the bedrooms.

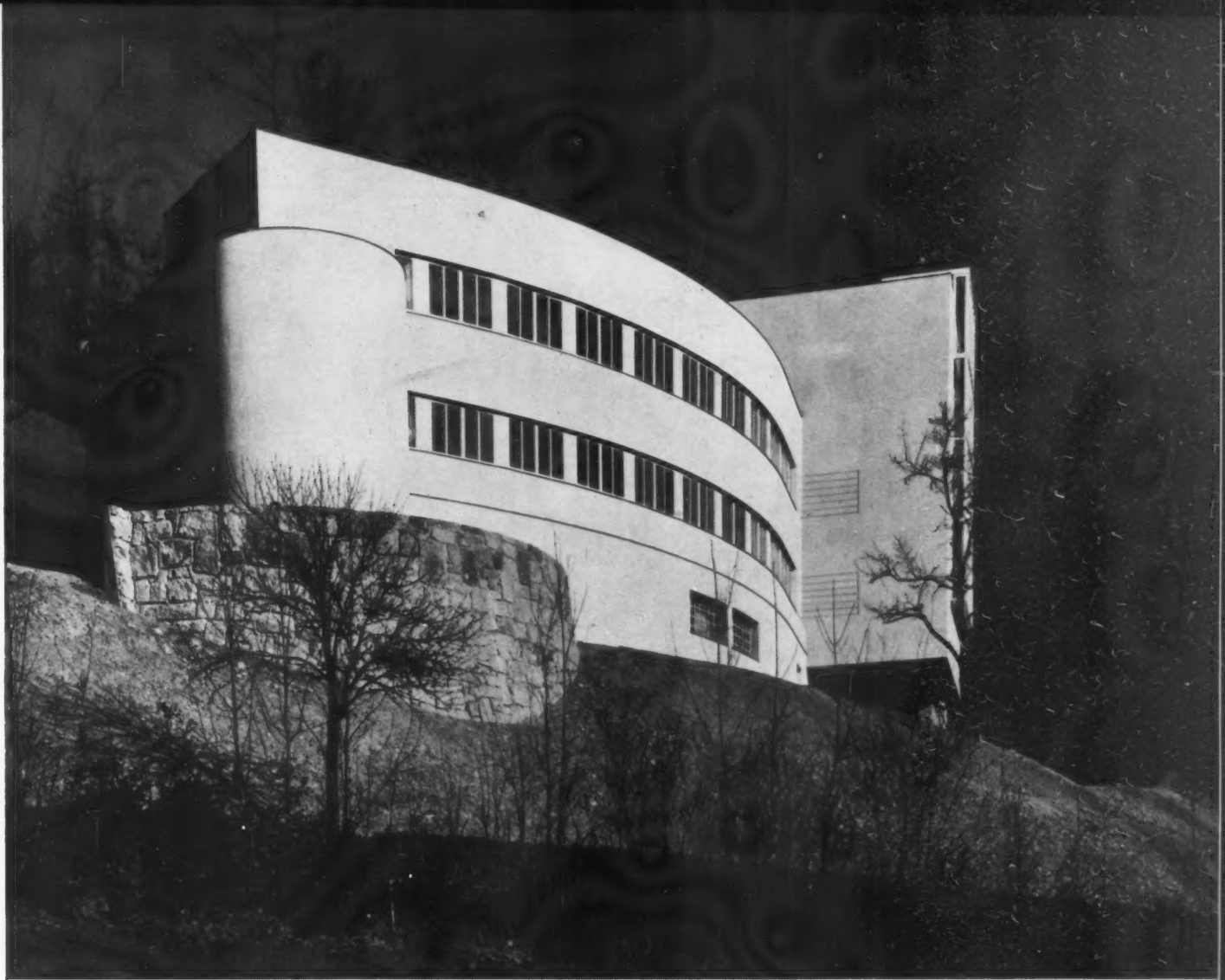
The following year Herr Steineder built the Kolpinghaus at Wels, the neighbouring town to Linz, and also began the Girls' School there. Both these buildings show a growing mastery and simplicity in his work. In the Kolpinghaus the tall vertical windows admirably break up

the monotony of the building and are perfectly balanced by the three darkly coloured balconies. This device of tall vertical windows and very prominent balconies is used again to enliven a long low building in the school.

The building at Kremsmünster was begun in 1931 and the site chosen was a small hill standing slightly outside the village, looking across to the famous baroque monastery. The major problem to be solved here was that of finding a plan and elevation which would perfectly fit so unusual a setting. How well this has been solved, and how well placed the building is in relation to the hill, can best be seen from a photograph of the model (Plate ii), where the slopes are accurately reproduced. Also in considering the central block of the building it is essential to remember the situation. Both from the road and from the approach it is seen in such acute foreshortening that the effect of weighing too heavily upon the entrance—as in the illustrations it appears to do—is very much lessened by the upward lift which such views entail. This block, above the entrance hall, contains the chapel, and the large vertical window at the east end will in all probability be filled later with painted glass. From the plans it will be seen that the wings to the north and south of the



The ground floor plan of SUBIACO. "From the plans it will be seen that the wings to the north and south of the chapel are completely divided, and the design is reminiscent of the usual arrangement of cloisters on the opposite side of the chapel to the convent buildings. Here the place of the cloisters is taken by the curved Retreat Home, which is a simple arrangement, on the first two storeys, of rooms opening off a corridor. On the ground floor there are placed the boiler room, pantry and scullery, while at the end, at right angles to them, is the kitchen, connected with the dining-room immediately above it by a service lift. To the right of the entrance hall are the convent buildings, containing dormitories and rooms for the Mother Superior, nuns and the novices."



The entrance front of *Subiaco*, Kremsmünster, Austria, from the southwest. The model below shows the relation of the building to the slope of the hill on which it is erected much more accurately than the photograph. Architect: Hans Steineder.



PLATE ii

February 1934

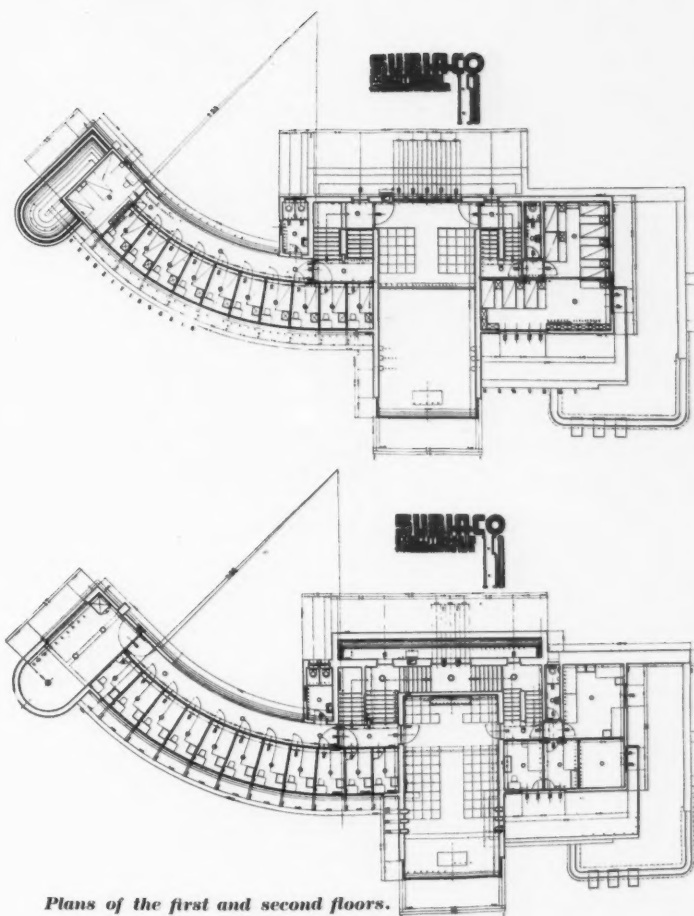
chapel are completely divided, and the design is reminiscent of the usual arrangement of cloisters on the opposite side of the chapel to the convent buildings. Here the place of the cloisters is taken by the curved Retreat Home, which is a simple arrangement, on the first two stories, of rooms opening off a corridor. On the ground floor there are placed the boiler room, pantry and scullery, while at the end, at right angles to them, is the kitchen, connected with the dining-room immediately above it by a service lift.

To the right of the entrance hall are the convent buildings, containing dormitories and rooms for the Mother Superior, nuns and the novices.

The interior decoration, neither here nor in the earlier buildings, can be considered as equally original or as good as his other work. The large doorway is fitted with an aggressive geometrical design, and the staircase looks heavy and clumsy, though the heading of the steps themselves is carefully and well moulded.

The influences which Herr Steineder himself considers paramount in his work may be summed up in his own words: "Corbusier for brains and Mendelsohn and Behrens for feeling." But apart from this, and perhaps destined in the long run to be more important, is a sincere admiration for English architecture, not as shown in its masterpieces so much as in its severely practical buildings. The old slums of Edinburgh, some of our early factories and the L.C.C. housing schemes (with their technical efficiency which is so often overlooked when comparing them with more showy but distinctly more shoddy continental plans) arouse his admiration more than the contemporary Austrian and German movements.

The "getting on with the job" without bothering about style, which is, since the end of the great tradition, the only sane part of English architecture, may, when influencing an architect with so innate a sense of form as Steineder, initiate a purer and less eclectic Austrian architecture. That his influence is ceasing to be local is



Plans of the first and second floors.

shown by the fact that he was chosen to be the architect of one of the most important modern hotels, that which is to be opened shortly on the new stretch of the Gross Glockner Strasse. His ambition lies more, however, in the direction of town planning, and he is now engaged upon various plans which are based upon a serious study of what measures English authorities have taken in clearing slum areas or accommodating growing populations.

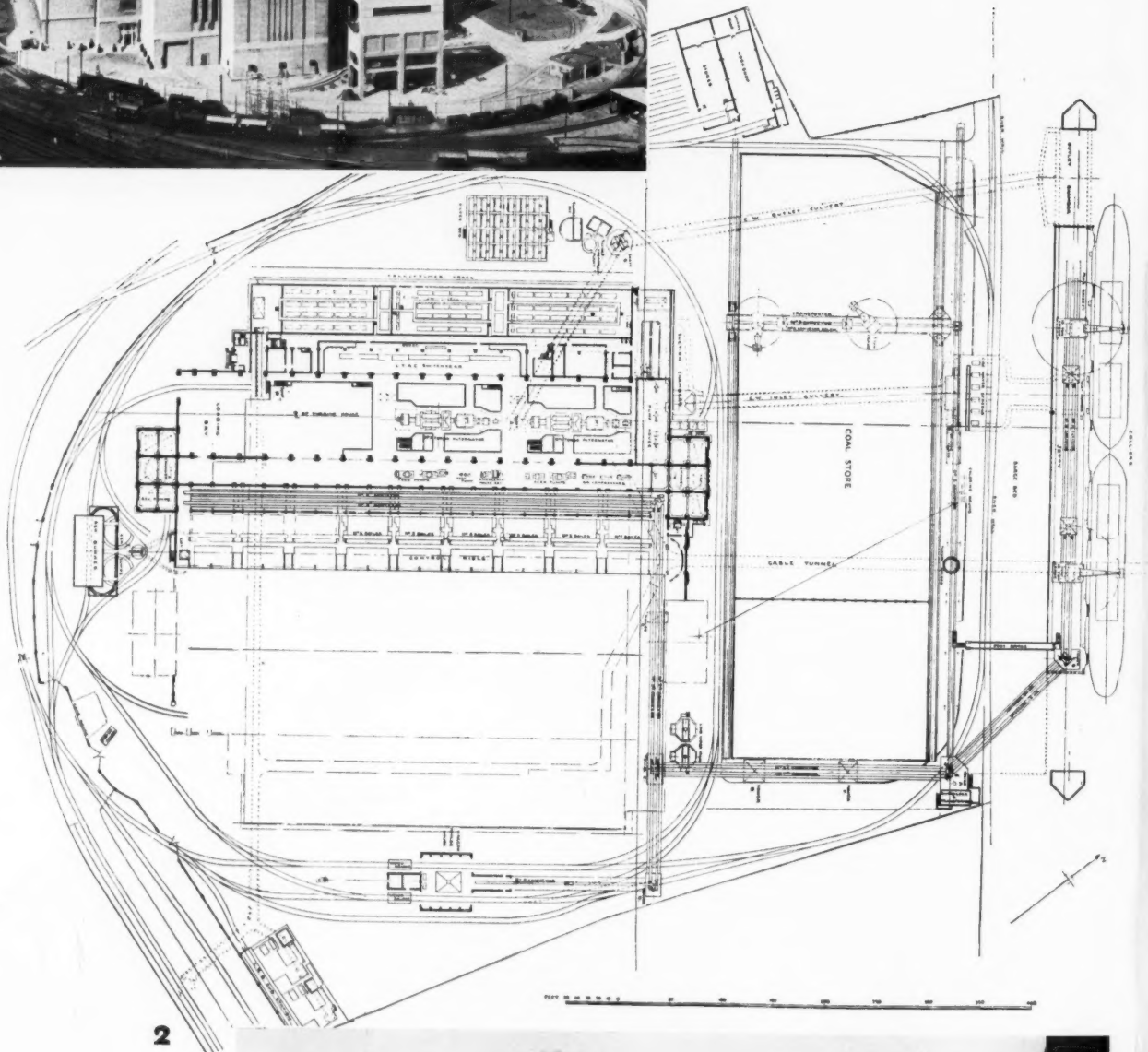


The illustration on the left shows the entrance front of the building from the south, and on the right, a view from the south-east.

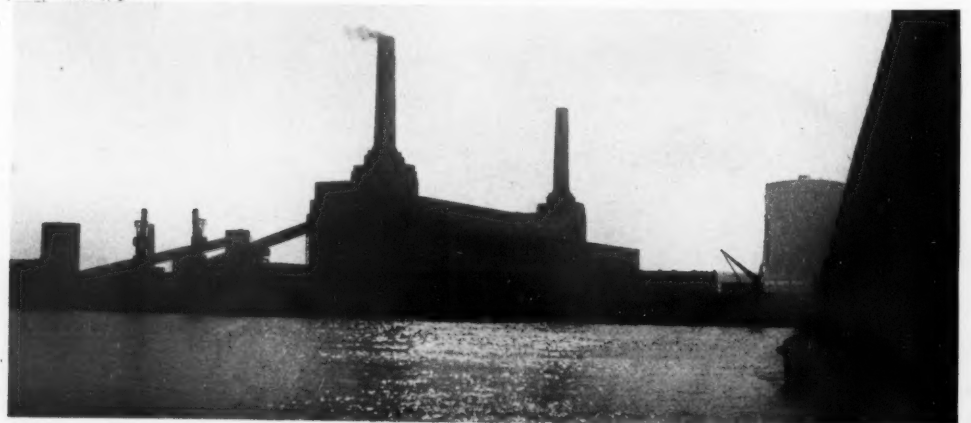


BATTERSEA POWER S

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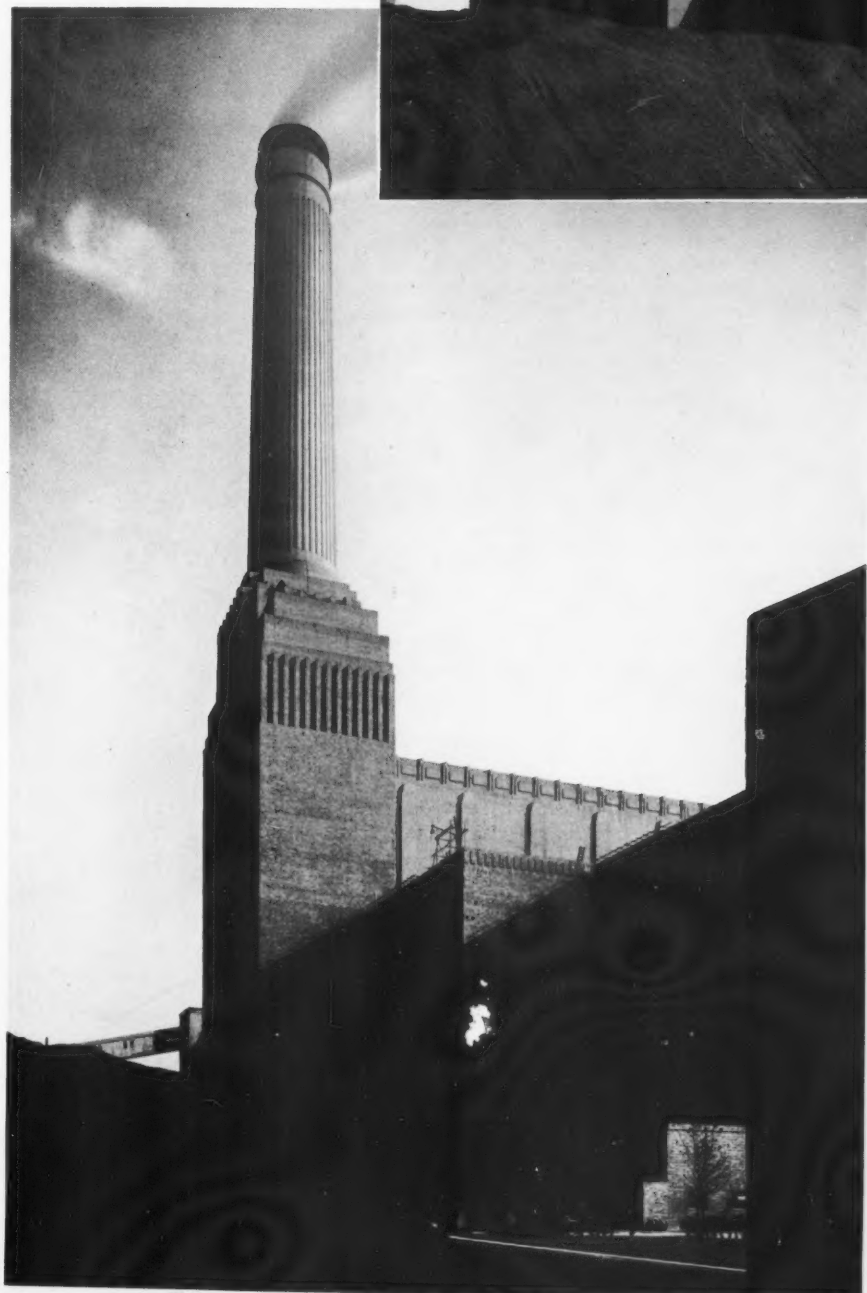
50

ART STATION

SIR GILES GILBERT SCOTT,
ARCHITECT FOR THE EXTERIOR



4



51

5

1. A view from the south of the half of the Power Station at present built. When the scheme is completed there will be four chimneys grouped about the centre of a symmetrical building. 2. The site plan. 3. From the north side of the river Thames. 4. From the north-east. 5. A detail view of one of the reinforced concrete chimneys. Each chimney is 181 feet in height and rises to 337 feet above ground level. Its internal diameter is 28 feet at the bottom and 22 feet at the top. At the bottom of each stack the concrete is 10 inches thick and at the top it is 6 inches thick. On the outer face there are forty-eight vertical flutings, each 6 inches wide by 3 inches deep.

Messrs. Halliday and Agate were the architects for the interior of the Power Station and Dr. S. L. Pearce was the engineer-in-chief.

Industrialism in the Stroud Valley

By TAMARA TALBOT RICE

So used are we to the rural in the country, and so out of harmony does anything industrial appear there, that when it is encountered, it evokes in us expressions of disapproval and of annoyance. Yet the mills which abound in the Stroud valley—one of the loveliest of Gloucestershire's lovely valleys—serve but to increase the charm of the place. Their old-fashioned water wheels draw from us affectionate smiles, their façades blend with the terraced nature of the district, and their general air of solidarity makes us think with envy of the days when industry did not necessarily bring in its wake city smoke and smell, trade union disputes, misery, poverty, and under-feeding.

Industrialism—if such it may be called—dawned early in Gloucestershire, as early as the days of Edward III, when that monarch brought prosperity to the district by sending to Flanders for weavers, dyers, and fullers. It was not with bribes that he drew them to England, but by telling them that in their native land—to use Fuller's picturesque language—they were “used rather like heathen than Christian, yea, rather like horses than men; early up and late in bed, and all day hard work and harder fare (a few herrings and mouldy cheese). But oh, how happy should they be if they would come over into England, bringing their mystery with them. Here they should feed on fat beef and mutton, till nothing but their fullness should stint their stomachs.” Added to these blessings they should find for wives “such English beauties that the most curious foreigners cannot but commend them.”

They came bringing their secret with them, and taught it to the English, who, before their coming (again in the words of Fuller), “knew no more about what to do with their wool than the sheep that wears it, as to any artificial or curious drapery, their best clothes then being no better than friezes, such their coarseness for want of skill in the making.” Industrialism developed remarkably quickly, and by the end of the fourteenth and early fifteenth centuries the cloth weaving districts of England enjoyed great prosperity. Then, during the Civil Wars, the inevitable reaction occurred, trade declined rapidly, many clothiers were ruined and many fled the country, and soon the wool industry was so affected that Charles II passed a law enacting that corpses should be buried in woollen shrouds or in clothes made only of wool. Non-compliance was punished by a fine of five pounds, yet so offending was the law that many preferred the penalty to submission. Such were the friends of Ann Oldfield, the celebrated actress, who was buried in 1731 in “a Brussels lace head dress, a Holland shift with tucks and double ruffles of the same, and a pair of new kid gloves,” thereby inspiring Pope to write, in a manner somewhat reminiscent of the nineteenth-century Gautier:—

“Odious, in Woollen, ’twould a saint provoke,”
Were the last words that poor Narcissa spoke.
“No, let a charming chintz and Brussels lace
Wrap my cold limbs and shade my lifeless face,
One would not sure be frightful when one's dead,
And—Betty—give this cheek a little red.”

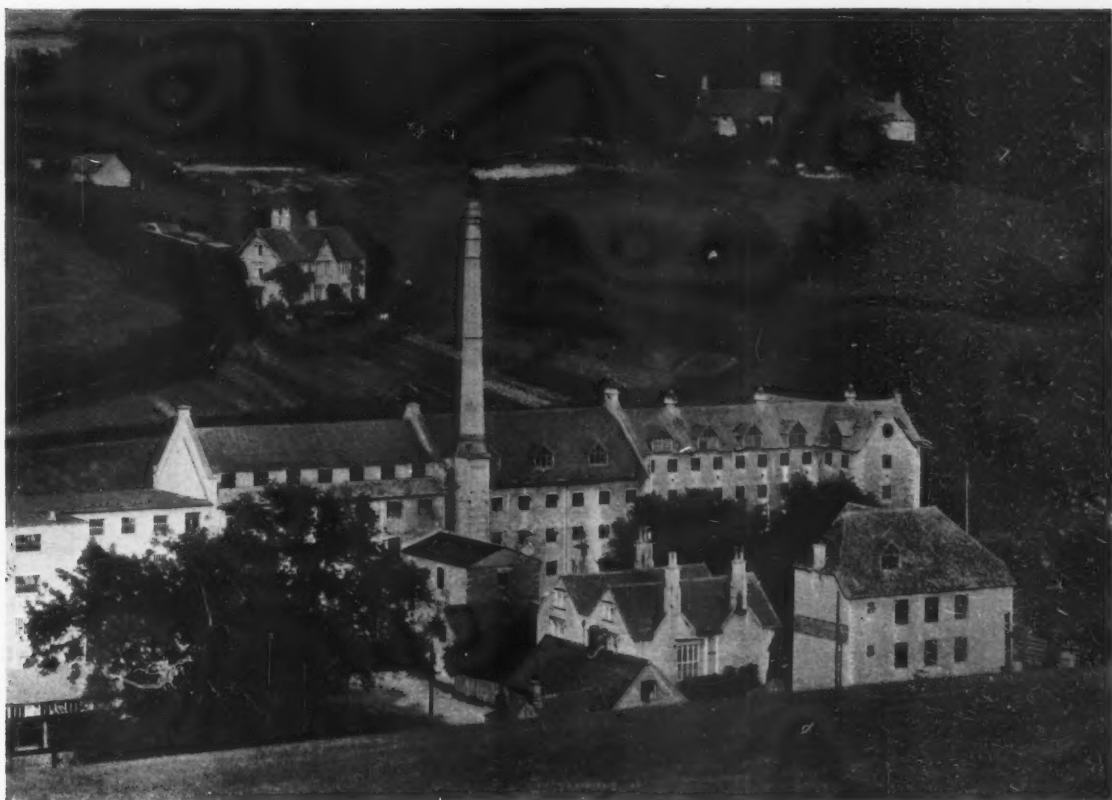
This law was revoked only in 1814.

Little remains of the original cloth mills which were erected in the Stroud valley by or rather for the Flemish weavers, most of the early buildings having been practically entirely reconstructed in about 1800 to suit heavy machinery and more advanced methods of production. Equally rare are contemporary references to these mills, and it is due to Rudder that we know that there were early in the eighteenth century, eighteen of them belonging to about thirty master clothiers. Today it is impossible to point to any mills in the valley which can claim to be numbered among these eighteen, yet it is possible to draw attention to three mills which stand out as notable examples of the earlier industrial buildings. Their survival is probably due to the fact that they are still used for milling grain or for storage purposes, and do not therefore require exceptionally large or heavy machinery. Two of them have the pointed gables and delicate proportions which are the marks of sixteenth-century Gloucestershire domestic architecture, whilst nothing but the water wheel differentiates the third, and somewhat later mill from the numerous seventeenth-century cottages to be seen throughout the district. It is amusing to watch these features of domestic architecture persistently protruding in all but present day factories, and it is especially interesting to trace their outlines in buildings of the early industrial age, when the almost patriarchal and limited era of production was dying out and the modern, highly mechanized and large scale period of manufacture was dawning. In factories of the eighteenth and nineteenth centuries features of contemporary domestic architecture predominate, investing them with that peculiarly uncommercial, that essentially



1. BENTLEY'S PIANO FACTORY AT WOOD-CHESTER, probably built about 1740, and embellished with a pediment and bell tower.

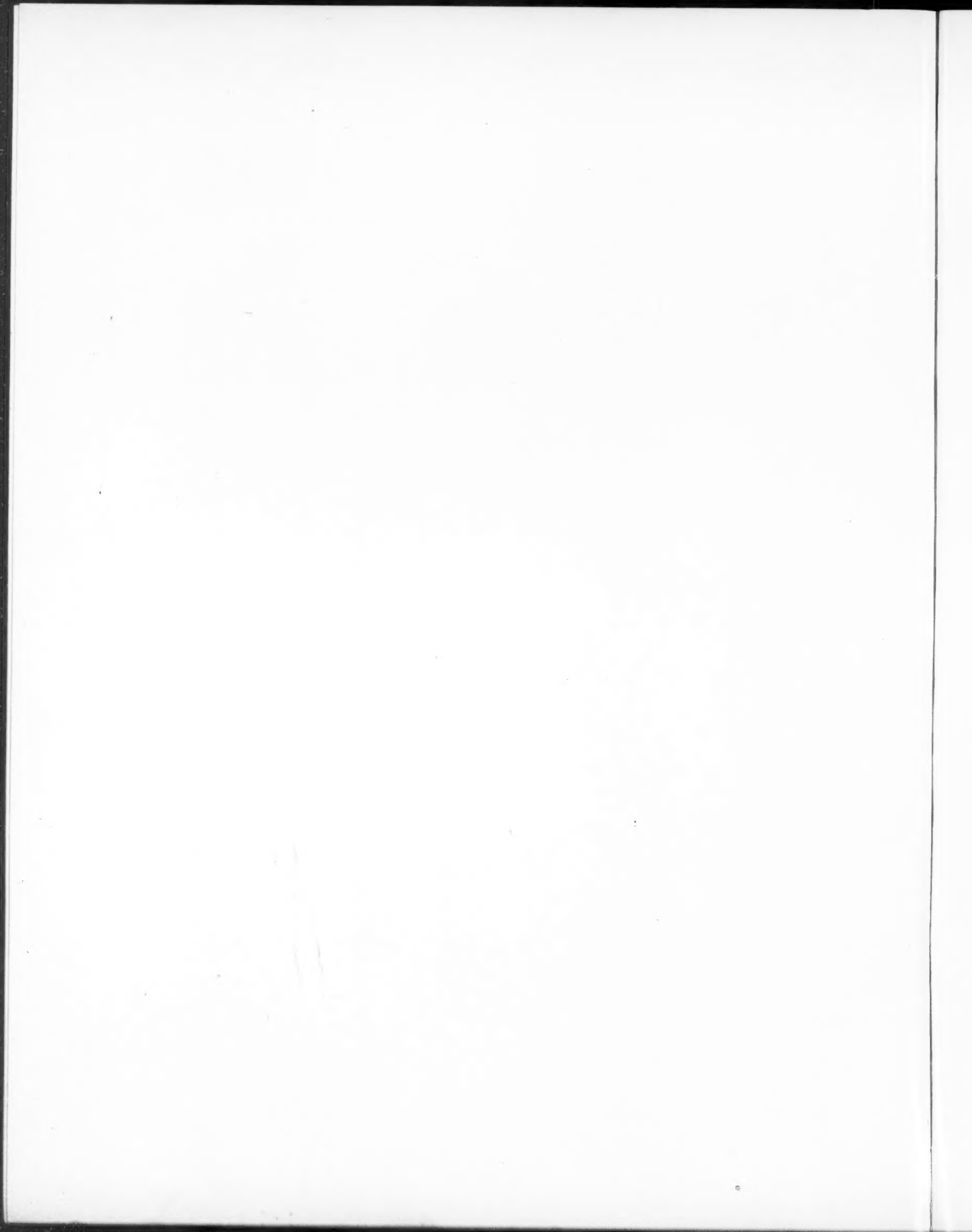
A typical example of the Renaissance style of architecture characteristic of the mill buildings in the district.



A bird's-eye view of Messrs. Walker and Sons' hosiery works at Donicote. This is the largest and finest stone-built industrial building in the valley. The factory was rebuilt in 1798, and additions have since been made to it from time to time, the dates being added at intervals along the façade. It is interesting to note that some of the buildings seen on the right of the picture are of the Cotswold gabled type.

PLATE iii

February 1934





2. A late medieval mill displaying gables and other features of the contemporary domestic architecture of Gloucestershire.

3. One of the few surviving Gloucestershire wool towers in which the scoured wool was hung to dry over hot flues. This tower stands opposite Mr. Perkins's pin factory.



4. MR. PERKINS'S PIN FACTORY AT WOODCHESTER. The façade was designed by Inigo Jones. All these photographs were taken by Major Talbot Rice.

residential atmosphere, which constitutes their greatest charm. Such was the vigour of that great country house style of architecture in the prosperous, leisurely Georgian period that it made itself felt in all large buildings, whether they were actually intended for mansions, or as schools, hospitals, poor-houses or factories. In the latter the rectilinear characteristics of Georgian architecture were particularly stressed, and the result having proved extremely suitable to the requirements of an industrial building, these characteristics have become, throughout the intervening period, the key-note of the factory façade. Today all modern factories are rectilinear, and once again rectilinearism has become a feature of domestic architecture. However, this time, in opposition to the Georgian period, it has been reintroduced into domestic architecture by industry—that merciless master of the moderns—as yet with not altogether happy results.

The Georgian factories which are so numerous, almost, I might say, so characteristic of the Stroud valley industrial architecture, are long, narrow buildings, which stretch along the bank of the river. The rather ornate Donex mill situated at Chalford, is rendered more attractive to the eye by the addition of a bell tower, but the finer mills of this type are adorned with a pediment as well as with a bell tower. These features invest the mills with an outline curiously evocative of those Georgian mansions surmounted by a gazebo that stand as examples of the finest domestic architecture that any country has ever produced. Like the mansions which they resemble, and in which were evolved those unique traditions of country life that render rural England so peculiarly intriguing today, these mills of the Stroud valley were responsible for the production of a rare and greatly prized red cloth of a colour so pure that its excellence was imputed to the properties contained in the waters of the Frome, rather than to the skill of the dyers who produced it. Yet, although the manner of life evolved in England's stately homes still persists, the red cloth which the mills manufactured is no longer produced. Umbrella sticks have come to fill the place where fabrics of the imperial dye were made—I wonder if their steel skeletons flap gaily in the rain and wind, laughing at the thought that one day the halls of country seats will be adapted to a purpose as prosaic as that to which the scarlet cloth mills of Stroud have been turned.

The largest and finest building in the valley is the hosiery factory of Walker and Sons, Ltd., at Donicote, Plate iii. Rebuilt in 1798, it has since been added to at various periods. The dates at which the additions were made can be discerned at intervals

by a chimney of excellent line. It is here that John Halifax, gentleman, is reputed to have worked, and local mill hands still point to part of the building where they maintain that his wheel stood prior to the nineteenth-century reconstruction, which, they say, dislodged it from its place.

As one wanders up the valley, numerous mills of varying architectural merit are passed, but it is Mr. Perkins's pin factory at Woodchester, 4, which evokes the most romantic imaginings, not on account of any supreme beauty or perfection in its outline, but because a section of it is formed by part of the façade of what was once a mansion designed by that most exquisite of architects, Inigo Jones. This pavilion now forms part of the pin factory, still an extremely prosperous concern, though it can no longer boast of the distinction of being the largest in England, as it could in the nineteenth century. Affixed to this façade stretches the somewhat unambitious building of the most utilitarian type, lacking any such embellishment as pediment or clock tower, containing of the valuable only that excellency in the disposition of its windows, which seems to characterize all eighteenth and nineteenth-century factories and to be so conspicuously lacking in those of the present day. Inside the building the machines roar in the Inigo Jones pavilion, turning out press-buttons and pins by the million. Only the top floor of the pavilion remains unindustrialized. It is reached by a huge ladder and consists of but one room. As one stands there, enclosed by walls still faced with fine though battered panelling dating from Palladian times, gazing through the trap door down on to the roaring machines, one speculates yet once again on the strange trend of life.

Of the history of the Woodchester mills we know little. In about 1776 Sir Onesiphorus Paul erected the first local napping mill there, and shortly afterwards Mr. Freame and Messrs. Rich and Hawker followed his example. "On August 14, 1788, King George III and Queen Charlotte, accompanied by their Royal Highnesses the Princess Royal and the Princesses Augusta and Elizabeth, attended by Lord and Lady Courtown and Lady Harcourt, Colonel Digby, Earl Ducie and Sir G. Onesiphorus Paul, Bart.", visited the Woodchester napping mills, an event which was witnessed by some 30,000 people. It is intriguing to speculate whether the mill of the Inigo Jones façade was one of those thus to be distinguished, and whether the Royal party passed its rooms, disregarding the pavilion, intent only on the machinery which had newly been installed therein.



1

THE ART C

to provide any general æsthetic, he gives only a simple description of the technical processes of sculpture, followed by an analysis of "12 great Works of Sculpture." He does at least describe something of the relationship between the artist and his material. To put the technical cart before the inspired horse seems sometimes, paradoxically enough, to be the best way to make him fly. It is certainly better than Mr. Maryon's method of confronting Pegasus with a list of eight sculptor's aims. These, he says, are Nature Study, Carving for its own sake, Unity, Character and Feeling, Power, Life and Movement, Decorative Effect, and Style or the Personal Equation. He then proceeds to discuss and illustrate the fulfilment of these aims, and in

Art is the expression of experience in a directly communicable form. Beauty is the measure of the value of the experience, and must depend also upon the skill with which it is revealed. The artist may undergo the experiences portrayed at the time he expresses them; they need not be dug out of his memory: they may, like Picasso's apparitions, "force themselves upon him." Picasso sees, he says, for others, so that he can put these sudden apparitions upon canvas. Every time he begins a picture he feels as though he were throwing himself into a void. He sees descending on him "a superior order of exigencies" (*Art Now*: Herbert Read, p. 123). Since, then, the experience expressed by the artist may come upon him as he works, it may be modified by the material in which he works. A rhyme may turn the direction of a poem. The need of a window may alter the design of a house. The strength of his marble must circumscribe the liberty of the sculptor's vision.

But if these accidents are to contribute to the work of art and not to mar it, they can only do so by the inspired opportunism of the artist. If he is to succeed, his experience must be able to grow as he works and to derive life from his material. Only then does Theophile Gautier's dictum become true:

... l'œuvre sort plus belle
D'une forme au travail
Rebelle
Vers, marbre, onyx, email.

and his advice:—

Sculpte, lime, cisèle
Que ton rêve flottant
Se scelle
Dans le bloc résistant.

This seems to be the reason why Sargeant Jagger's approach to the art of sculpture* is more real than that of Herbert Maryon.† Sargeant Jagger does not attempt or pretend

* *Modelling and Sculpture in the Making*. By Sargeant Jagger (*The Studio*).

† *Modern Sculpture: Its Methods and Ideals*. By Herbert Maryon (Pitman).



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doing so makes it amply evident what false criteria they are. For a more motley collection of sculpture could scarcely have been collected than that which he has chosen to reproduce. Good and bad are jumbled indiscriminately together, but the bad predominate so heavily in numbers as to show an entire blindness to the real end of art.

Sargeant Jagger, on the other hand, by confining himself to the purely technical aspects of sculpture, avoids the pitfalls of false theory, and his taste as illustrated by the 12 works he has chosen for analysis shows a certain discernment. The examples of modern sculpture he produces might, however, have been considerably improved on. And further he praises Rodin's Burghers of Calais for their unity of design as a group, which is surely the one merit in which they are lacking.

He shows clearly, however, the limitations which a sculptor's material must impose upon him, that a design to be executed in stone cannot for instance contain any heavily overhanging or projecting features. Sculpture may in fact be classed with architecture as the most objective of the arts and therefore the most at the mercy of its material. Music at the other end of the list is the most subjective: the experiences it expresses have no external existence: in so far

Photograph by courtesy of Messrs. Alex. Reid and Lefevre.



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1. LA PENSEE, BY ARISTIDE MAILLOL. One of the greatest sculptors of recent times. Was able to embody his experience in a classical form. Realized, apparently, that motion is best expressed by the dance: and expressed principally the static aspect of form which is especially the sculptor's province. Only accorded this one illustration out of 336 examples of modern sculpture in Herbert Maryon's book. 2. MADEMOISELLE POGANY, BY CONSTANTIN BRANCUSI. One of the comparatively few interesting examples of sculpture in Herbert Maryon's enormous book. 3. THE GREAT BIERI. A specimen of primitive African sculpture from Sargeant Jagger's book. 4. EGYPTIAN 18th DYNASTY GRANITE GROUP, SENMUT AND A PRINCESS. ABOUT 1470 B.C. "The accompanying example fully illustrates all the great qualities associated with the carvings of ancient Egypt. The calm and peaceful serenity of the conception, the total absence of movement, the symmetric shape of the mass, which conveys such a strong feeling of architectural stability—these are the first impressions one receives at a glance." (Sargeant Jagger.) 5. FAUN AND NYMPH, BY GIOVANNI NICOLINI. This work is chosen by Herbert Maryon as a happy example of circular design, and shows very clearly that a piece of sculpture may form a very perfect circle and yet remain a very bad work of art.



5



6

THE ART OF SCULPTURE

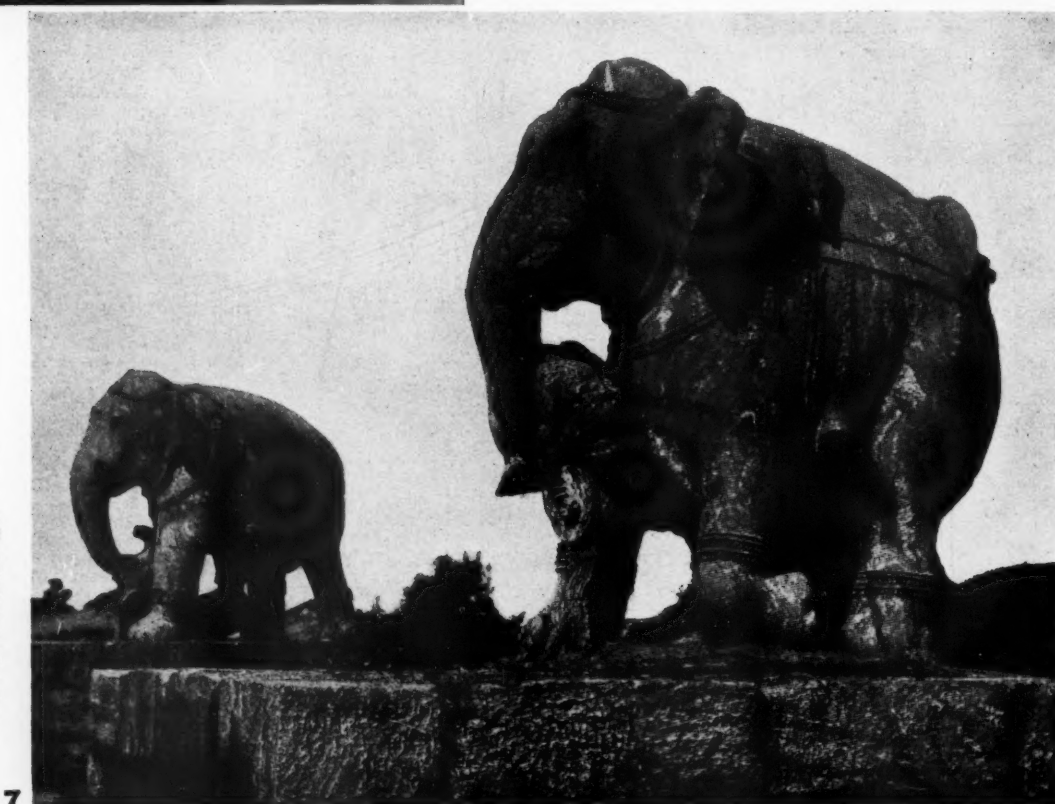
as it is representational it represents thought processes in the mind itself. It has no existence in time, as time is one of its ingredients. Yet exactly the same principles are at work in producing an inspired piece of music as in producing an inspired piece of sculpture. In both the experience, the significant feeling of sound or shape, is put into a form in which it can be directly conveyed to the listener or the beholder. And these two opposite arts correspond closely when the visual shapes which many people see when listening to music are taken into consideration. There is a possibility of a new plastic or at least pictorial art developing in the future in which time will be embodied as in music, and which will consist in symphonies of changing shapes. Surréaliste films have already attempted something of the kind.

While sculpture is well able to suggest movement, it is perhaps by reason of its durability and immobility the art that can best express those regions of the mind that are especially concerned with the contemplation of perfection. The decadence of sculpture since the ages of faith may largely be attributed to the decline of religion as an inspiration. The rich paganism of the classical or the renaissance worlds, and the austere mysticism of the Gothic era were alike able to excite experience worthy of animating stone or bronze. Mr. Maryon's list of eight sculptor's aims can never do so. Nor could the false religious shadows of the Victorians. The inspiration of modern sculpture that is worthy of the name (but not apparently for the most part of a place in Mr. Maryon's encyclopædic work) is based on a new understanding of the world that is mystical in its intense love of truth. It is only by embodying a divine experience that the clod of clay can become a work of art.

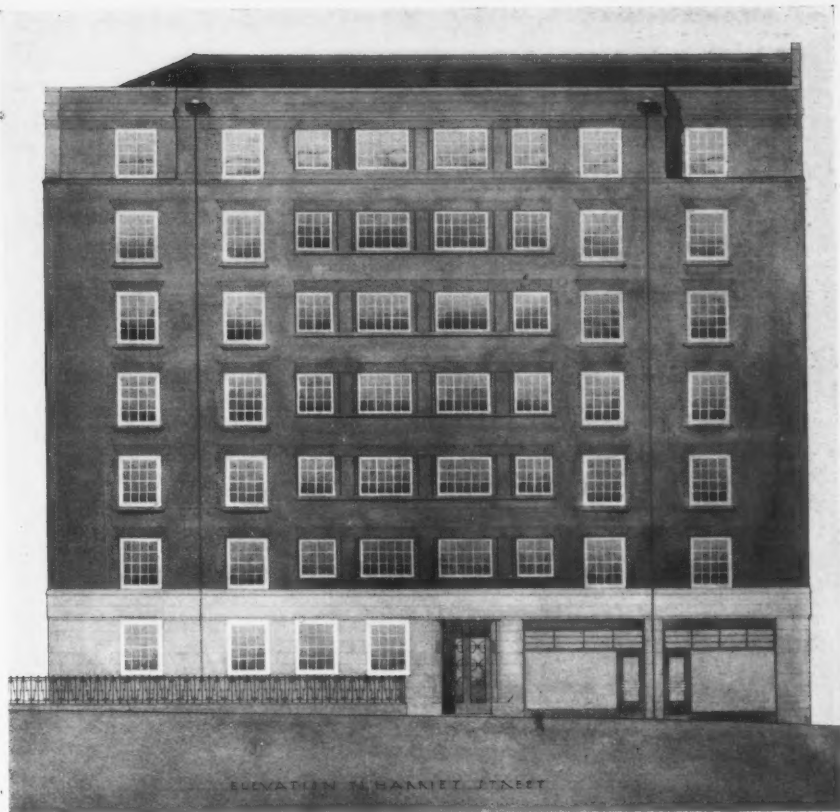
BRYAN GUINNESS

6. A Greek relief of the fourth century B.C. from Sargeant Jagger's book. 7. ELEPHANTS AT THE TEMPLE OF KHANAKHA, INDIA, 13th CENTURY. "It is only natural that the elephant should have inspired Indian sculptors of all periods. In real life it is probably the most monumental of all living creatures. With its huge powerful frame and slow deliberate movement, together with the massive simplicity of its shape, this magnificent beast positively cries out to the sculptor to represent it in stone." (Sargeant Jagger.)

56



7



1

FLATS IN LOWNDES SQUARE, LONDON

MESSRS. JOSEPH, ARCHITECTS

The flats at No. 43 Lowndes Square are designed so that each floor is easily convertible into one, two or three flats with the minimum of alteration. As at present arranged, there

are two small flats on the ground floor, a large one occupying the whole area of the first floor, two on the second, large ones on the third and fourth, and two each on the fifth and sixth floors. The illustrations on this page are:—

1. The façade to Harriet Street contains the principal entrance with two shops adjoining on the ground floor. This front expresses the kitchen and servants' quarters as it faces due north.

2. The front to Lowndes Square forms the considered part of a larger scheme. The base as far as the first floor cills is carried out in Portland stone, the remainder in a special warm grey-brown 2 in. textured brick. Interest is given to the brickwork by vertical fluting in the piers, which are deeply recessed and arched over.

3. A view of the ground floor entrance hall looking towards the main staircase.

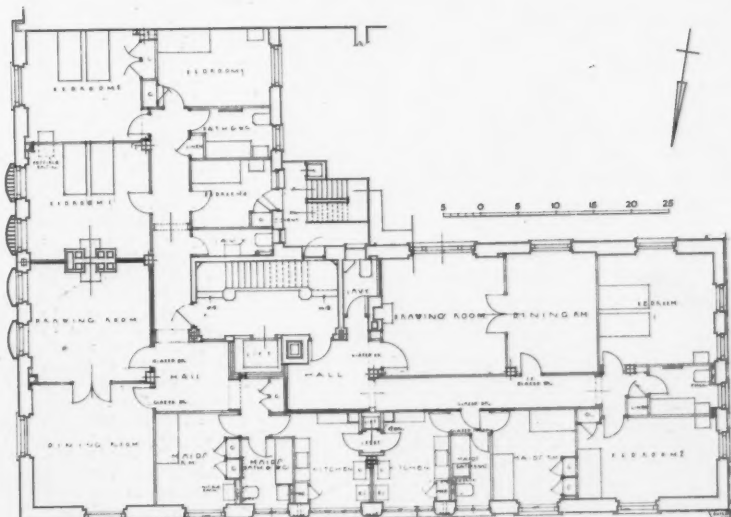
4. A typical floor plan.



3



2



4



The top and centre illustrations are of a welded tubular steel shoe rack, cellulosed black with chromium plated cross bars. This rack will carry up to twelve pairs of shoes. The hinged top can be detached if necessary and is provided as a table on which to place suit cases. It is made of a thick plywood covered with black linoleum, edged with stainless steel moulding with a black rubber core. Two strips of similar moulding of a smaller size are fixed along the top surface of the linoleum to prevent suit cases from slipping when being packed or unpacked. The bottom illustration is a welded tubular steel towel rack, cellulosed grey, with the three top cross bars chromium plated. This rack is designed to take the place of the usual light wooden towel horses that are normally used in houses containing several bedrooms in which no built-in wash basins are fitted.

ON THE RACK

SOME WELDED FURNITURE

DESIGNED BY R. DUDLEY RYDER



Utopia

By ARCHIBALD LYALL

THE NEW PLEASURE. By John Gloag. London: George Allen and Unwin, Ltd. Price 7/6 net.

NATURE, said Wilde, copies Art and it may well be that Science does the same. Jules Verne wrote of imaginary machines like submarines and then scientists invented them. Mr. Wells, I think, in his early undidactic days did something of the same sort with flying machines. It is perhaps not too wildly foolish, therefore, to hope that the scientists will follow the artists and give man a new, cheap and harmless drug which will transform his life into a vale of laughter. Mr. Aldous Huxley created soma and now Mr. Gloag has given us Voe—though, unlike soma, Voe is a stimulant heightening sensibility and not a narcotic deadening thought. Do the literary swallows once more portend a scientific summer?

Professor Adrian Frankby, one time Reader in Biochemistry at York, little dreamed of the changes he would bring about when he published the results of his researches into a substance which, taken like snuff, intensified the sense of smell, hitherto the Cinderella of the senses. He, being a scientist, called the fateful pink powder Gamma 8, but it was to be known throughout the world as Voe when Jules de Rojaques, the Perfume King, insisted on putting it on the market. His advertisements were a stroke of genius—simply “The New Pleasure.”

But the New Pleasure has to contend with the purveyors of all the Old Pleasures. The tobacco interests and the confectionery interests are the first to be hit, and they hit back through the newspapers. The advertisement managers, the circulation managers and the proprietors combine to attack Voe. Bishops, M.P.'s and a few tame scientists are brought in to take a hand, but Voe triumphs over advertisement boycotts and denunciations of “England's drug doom” for the simple reason that more and more people are taking it.

Now it might be supposed that for the twentieth-century townsman there could be no greater purgatory than an intensified sense of smell. Nevertheless, the sales of Voe go up and up, and as people take it their habits change. Gaspers and cheap sweets are the first to go. Motor-cars pay the penalty of the stench they have created. Horse-buses once more roll down Piccadilly. Railways come into their own again (though to my mind the smell of a railway terminus is perhaps the most revolting of any). Gas is replaced by electricity. People cannot bear the smell of each other. They cease to congregate in crowds. Racing dies a natural death, and only the complete rebuilding of all the theatres and cinemas in the country

saves the entertainment trade. The Voe-takers rediscover the country. They return to the land. They farm. They go nudist. They hike. They bike.

A new mode of sexual selection comes into operation. Turning their backs on the happy promiscuity of the 1930's, people choose their lovers by their smell and, according to Mr. Gloag, they find very few indeed whose odours are to their taste. The population falls (though I could not quite see why that followed). The cities are deserted and agriculture comes into its own. In the last chapter or two Mr. Gloag paints a depopulated London rebuilt on the lines of Sir Christopher Wren.

As professor Frankby returns in the early morning from the celebrations of Bernard Shaw's 125th birthday by motor-boat to his house at Richmond, the dazzling whitewash and the gilded pinnacles of the Houses of Parliament look across to the park where once St. Thomas's Hospital stood, and he shoots under the single steel and glass span of Lambeth Bridge and comes in sight of the other park which stretches all along the north bank. There is no smoke in the atmosphere, the river runs clean as in Gloucestershire and the green lawns come down to the water's edge. There are many more elms than nine at Nine Elms. Chelsea Hospital and Old Chelsea Church rise out of a woodland.

Cows waded deep in the lush grass of the Battersea meadows, and the high ground of Clapham was purged with young beech woods, while the slopes of Lavender Hill were dark with fir plantations. At Wandsworth . . . there was a big swimming pool, bordered by an open-air restaurant and sun-bathing terraces . . . He saw a heron fishing among the reeds on the Fulham bank.

Ahead of him the country houses of Richmond and Roehampton

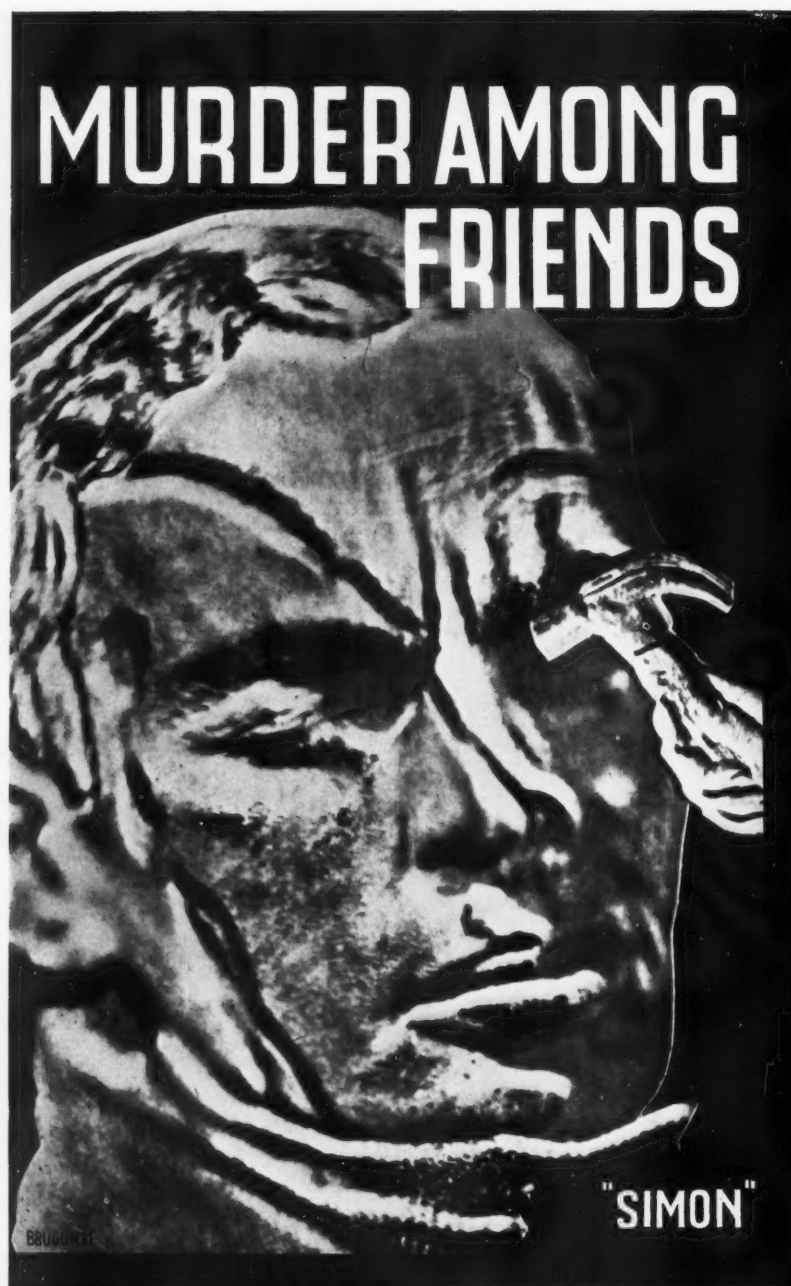
Were like open pyramids, the pyramid form being suggested by four or five floors which extended from a stout central supporting column, and which were recessed as they ascended. This central column accommodated lifts, emergency stairways, water-closets, lavatories and storage space for furniture.

There were no walls, and the house was really a series of shelves, each shelf or floor being bordered and transversed by grooves with corresponding grooves in the ceiling above, and flexible glass or opaque screens slid in these grooves, so that rooms of any shape or size could be quickly arranged to suit any need, and could be adjusted to face any aspect. The side that was open to the air could be warmed from heat rays that were distributed by power plugs placed at regular intervals along the outer edge of each floor. The floor could be left completely open, all the screens being wound into the reception bays in the central column, so that fresh winds might sweep through this castle in the air by night or day. In winter, with the screens curtained by fabrics, these houses became clusters of warm cells, large or small according to their owners' wishes.

It may well be asked what has become of the population of London in the meanwhile, but the whole population of England has fallen so rapidly that when Frankby was canonized as St. Adrian a century later it was a mere three millions. As I say, I could not myself quite see just how a mere agoraphobia and a liking for a country life would have such a drastic effect on the population, and Mr. Gloag does not go into more detail than saying that it did. He has, I suspect, yielded to the temptation to paint his Utopia without explaining exactly how it all followed from a mere olfactory stimulant. Still, the Utopia is so pleasant to contemplate and, I fear, so unlikely to come about that the skipping of a few essential steps in its realization does nobody much harm. Mr. Gloag narrates the story with such unflagging gusto and keen wit that the book is excellent entertainment in addition to being as stimulating as—as Voe. It should be read by everyone who is interested in architecture, everyone who reads newspapers and everyone who enjoys good satire.

Character on the Cover

MURDER AMONG FRIENDS. By "Simon." London: Wishart and Company. Price 7s. 6d. net.



The above illustration is from the cover of "Simon's" mystery story, and although it is not the custom of THE ARCHITECTURAL REVIEW to review mystery stories, even when they are written by its contributors, the cover of this book justified the inclusion of a review apart from the merit of the text. The photograph is by Francis Bruguière, whose work is frequently illustrated in the REVIEW, and it must be admitted that it is one of the first attempts in the way of a book cover portraying not only the motive of the story, but also its atmosphere. It has the arresting quality of the cover of one of the old two

shilling thrillers published in Victorian days, and those who have seen the covers of cheap editions of Lever and such novels as "Beautiful Edith," "Poor but Honest" and "In the Jaws of the Lion" will find in this distinctive "surréaliste" design by Bruguière the same arresting appeal. It is to be hoped that the enterprise of the publishers in using this sort of cover will be followed up elsewhere. After a time the eye tires of seeing twentieth-century novels in chaste retiring grey, mauve or green boards with a title in art school lettering in gold, and is

"SIMON" is the pseudonym of one of the regular contributors to THE ARCHITECTURAL REVIEW, and this is his first "mystery" novel. That imaginative quality always associated with his articles is afforded a much wider scope in the book, and is one which may help readers to identify him. I hope it will not, because the pseudonym puts the seal so intriguingly on the mystery of the novel itself.

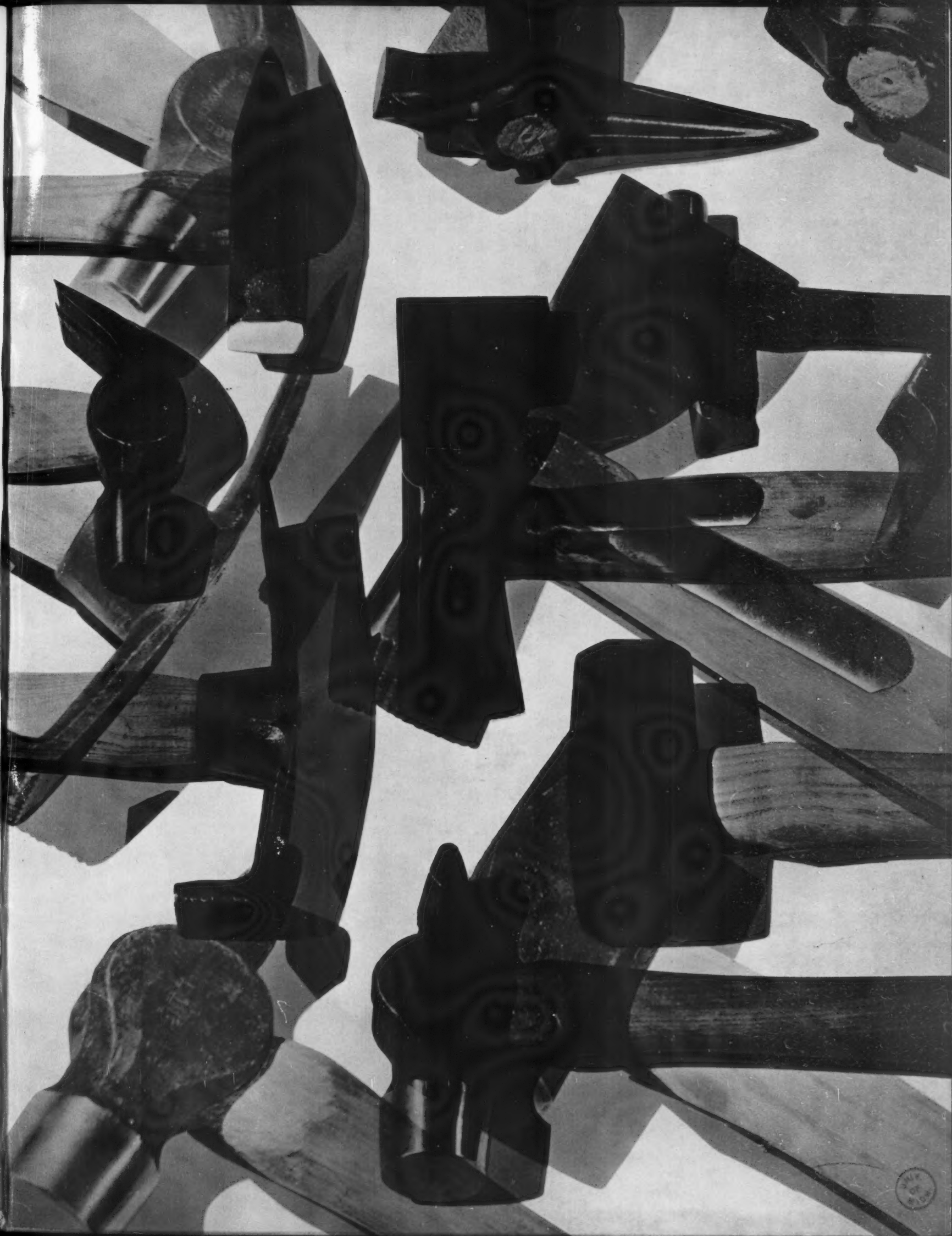
I am quite willing to admit that I was unable to identify the murderer until I reached the page on which "Simon" discloses his name, and that page is but two from the end of the book. There are few mystery novels which grip sufficiently to make me want to finish them at a single sitting, but this one certainly did. Francis Bruguière's brilliant cover design, which is reproduced on this page, creates the right atmosphere in which to commence reading the story.

Briefly the plot is that after a birthday party given in honour of his young wife, Guy Pudet, a famous historian, is discovered dead with a cup near him which, on analysis, is found to contain prussic acid. In the typewriter on his desk is a note of farewell to his wife. All the guests were old friends and there were no signs of robbery. Was it a case of suicide? At the inquest the jury returned an open verdict and Pudet's son, Miles, who was on bad terms with his father, is so tortured by the misguided suspicion with which he is regarded, that he determines to solve the mystery and unmask the murderer, for he is convinced that his father *was* murdered. The police are called in, but at a very early stage and without having accomplished anything of importance, they disappear from the story; the author wants to show off other and more intriguing puppets on his stage. Miles is confident that he can himself solve the mystery through psychological experiments on the guests who were present at the fatal party, and his success is told in a clever piece of imaginative writing. Who committed the murder? Read the book and enjoy suspense until you reach page 278. Who is

"Simon"? That is a mystery which, so far as I am concerned, must remain unsolved!

A. E. DOYLE

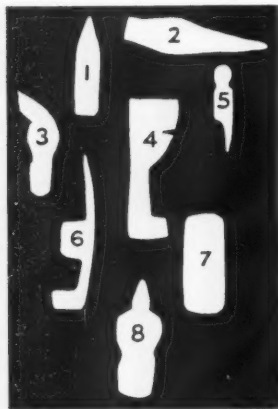
refreshed by an open confession in the cultured calm of a bookshop of the blood and thunder inside a book. Admittedly there are illustrated covers of mystery stories, but this is the first one we have seen done by an artist and on a seven-and-sixpenny novel. Therefore, it is illustrated as a precedent, and let us hope that it will be the beginning of the end of covers which rasp the nails like a file and are coloured dull red like Edwardian dining room wallpaper.



OVERLEAF, AT CLOSE RANGE

The beauty of forthright utility is seen at its best in working tools. Readers of the REVIEW will remember the surgical instruments recently illustrated in these pages (July 1933). At the Dorland Hall Exhibition last year sets of farmers' implements were used as decorative emblems on an important wall. Here is a small selection from the enormous variety of hammers used by various trades in this country. A hammer at first glance may appear

to have a very simple job to do. A great deal depends, however, on the force and direction on the desired impact, and on the properties of the material against which it has to be directed. All these things are bound to find expression in the size and shape of the hammer head—as, in a lesser degree, of the handle.



The key to the diagram is:—

1. Boiler maker's scaling hammer. 2. Coal hammer for breaking up coal. 3. Farrier's claw hammer. 4. Lath hammer. 5. Exeter riveting hammer. 6. Fruit hammer for packing fruit. 7. Stone mason's club hammer. 8. Engineer's cross pane hammer.

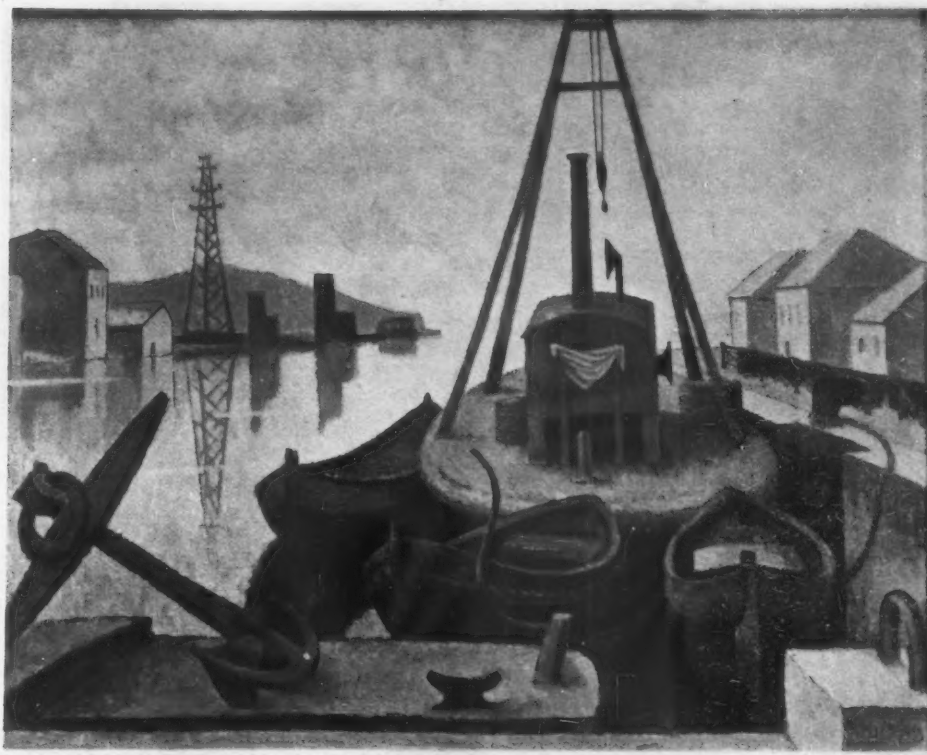
The photograph is the work of Francis Bruguière.

PLATE iv

February 1934

the pictures of richard wyndham

by sacheverell sitwell



1. "SALVAGE-BOAT, MARTIGUES."



2. "BLUE WOODS."



3. "WILLOW STREAM."

It is almost impossible to recognize in Richard Wyndham's recent pictures the same hand that produced architectural drawings of Spain and Italy some four or five years ago. Since then, his talent seems to have made a simultaneous advance in several directions. When occasion requires he is an excellent portrait-painter, and there are but few landscape painters who have had that accomplishment. But it is in landscape that he has eventually found himself.

There are two or three varieties, even of these. The most important picture in his exhibition held at Messrs. Tooth's Galleries last year was the harbour-scene at Martigues, 1, painted in flat, solid tones which have composed themselves naturally from the walls of the houses and wharves, and from the flat harbour-water. The salvage boat in the foreground, with its mechanical, monotonous clanking, fits admirably into the emotional pattern of the picture. But, somehow, landscapes painted in that part of the world, in Provence, or in the Bouches du Rhône, can never show a painter in his true self. The shade of Cézanne is too near. He haunts that country as effectually as Shakespeare haunts Stratford-on-Avon. It would be better for painters to keep away, for a time, from Provence. The surprising thing is that this landscape does not paint itself upon the canvas when the artist is not looking, after the fashion of the piano mentioned by Berlioz that used to play Mendelssohn's concerto automatically, to itself, because it was so used to the fingers of generation after generation of students.

Of far more interest than Wyndham's attacks upon the South of France were the four or five landscapes of Sussex. The romantic and book-fed leanings of the English find any subject lying immediately under their eyes of notorious difficulty. That is why Wyndham precluded so well, a few years ago, with his drawings of the slums of Marseilles, of Spanish and Italian churches, of the Alhambra of Granada, and of anything

and everything not in Sussex. This is the country, or approximately so, of Birket Foster; and an English painter is as shy of Birket Foster as the traditional school-boy is of his own sister. Yet this problem has to be faced, sooner or later; and, in this instance, it has been the supreme test.

They are mostly winter-landscapes, and in these he has avoided that tendency to insist upon the bare branches of the trees so that a childish Noah's Ark effect of nursery wall-papers and nursery-pictures is produced. Such is what may be called the Chiltern school of landscape, of belated pre-Raphaelite origin. That tendency Wyndham has naturally, but scrupulously, avoided, being more interested in real appearances than in fictitious, childish charm. If his landscapes remind one of any other painter, perhaps it may be of the Englishman, Sisley.

For it is remarkable to what a degree the truth has been caught and imprisoned in them. The violet lines of distant woods, 2, refracted from what must be the light off the downs, make a frequent occurrence, and are a strictly local phenomenon never to be seen, for instance, where these lines are written, in Northamptonshire. Here the winter woods are of a lilac, chocolate colour, quite different from anything to be seen in Sussex. Also, the sea is far distant, and the nearness of this, in Sussex, must make an important difference. Wyndham's landscapes, when in leaf, have the same delightful and apparently simple technique. But the simplicity is only to the casual observer, for his pictures are the fruits of most careful and painstaking study. Indeed, the more difficult the subject the more nearly he has succeeded, and his Sussex landscapes are anything but easy. Meanwhile, it is probable that the mere stress of finishing so many pictures for this exhibition has been of great advantage to him. As with every other artist—the harder he works the better—for himself and for his public.

A Free Commentary

By JUNIUS

It is most important that all those who have laboured for the cause of better industrial design should not be too anxious as to where the credit goes for whatever may have been and may yet be accomplished. The omens are favourable, surely. With Mr. Pick as chairman of a Council for Art and Industry of which Sir Hubert Llewellyn Smith is a member, an inconvenience—shall we call it?—has been removed and a tribute paid in the proper English face-saving way. There is the Dorland House show to put those influential allies, the R.A. and the R.S.A., on their mettle. Sir Stephen Tallents also wields a doughty pen for the good of the cause in the opening pages of this issue. And conversation with the more intelligent shopkeepers and manufacturers seems to indicate that *Design for Today* is sowing good seed on well-harrowed soil. At the Board of Trade itself there are instructed and active-minded backers of the horse we all want to win. It doesn't matter whose colours it carries.

It is always pleasant to see a difficult and long-neglected job tackled with intelligence. The observant will have noticed with tolerance what typographers view with displeasure that owing to the mechanism of the typewriter, which necessitates that all the letter-keys, ranged on the arc of a circle, shall strike to the absolute centre of that circle, the spacing of typewritten characters is very ragged and aesthetically unsatisfactory. The broad letters M, m, for example, have to occupy the same space as the narrow letters I, i.

At the foot of this page is an illustration prepared at my suggestion by the courtesy of the Imperial Typewriter Company. In the first example is shown the ordinary standard type—quite a creditable design as typewriting types go—hitherto used by the company on its machines. Below it are two stages of a design worked out for the company by Frank Gayton, of Leicester. In the first design, it will be seen that the common practice, the narrow letter I for instance, has a long head serif and a foot serif nearly as long as the whole stem of the letter. This long serif is the old designer's obvious device to adjust the spacing. Starting from this point and feeling himself bound to a consistency which is not as necessary or desirable as he thought, he has produced head serifs of W, w, and foot serifs of his M, m, n, which make the letters look notably crowded. They are

also apt to clog when carbons are used for duplicating. The double curved tail of the Q, the nearness of the dotted terminal of the stem of a to its bowl, and of the terminal of the f to its cross-stroke are among other obvious defects. In his first experiment Mr. Gayton has designed a much more practical Q; he has opened up the a, S, E, G, f, C, s; his curtailing of the serif on the arm and tail of k, on the first and fourth stems of M, on both stems of x and y, and the shortening of the second and third stems of W and M have notably clarified these letters and made them definitely more practical when used for stencilling.

The unnecessarily emphatic terminal dot in the a, f, y and r have been successfully modified and I think there can be no question that Mr. Gayton's type is a much more logical design with much more specific reference to the needs of the job in hand than the standard type.

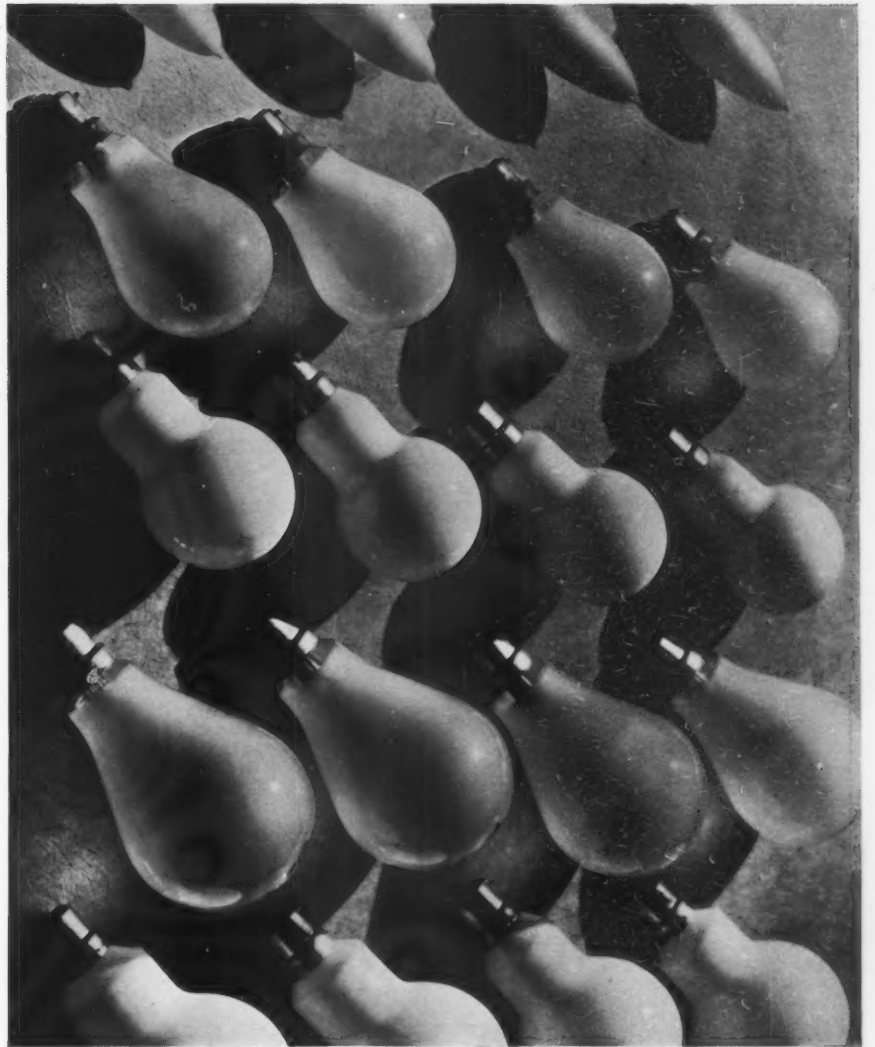
The "second state" example shows him to have attempted to solve the spacing problem of the narrow lower case letters l and i. The notable shortening of the foot serifs of these letters as shown in the "first state" example only emphasised the unevenness of spacing and had besides the effect of making the narrowed letter cut through the stencil too sharply. As to this "hockey-stick" solution of this l and i problem, I can only say that while at a first glance the two letters stand out as do eccentrics in a normal gathering, this effect of over-emphasis is rapidly dissipated as familiarity with the letter increases. Playing for safety one would back rather the straight than the curved l and i. But as there are definite echoes of the l and i in the treatment of the j and y—that is to say, there are those consistencies which pull the design together to give an impression of unity, I should cast my vote for the "second state." The point of this little adventure is that it has been approached from the right end; and it is gratifying that a British manufacturer has refused to be content with something illogical which has nevertheless been generally accepted.

It must be rather grand to own a newspaper. Then you can write nonsense and have it printed in the largest type and bravely boxed, whereas if you sent it to an editor he would just drop it into a waste paper basket. What, for instance, in a real world is this but nonsense? "The nation that is the first to equip itself with an overwhelming force of aeroplanes—the most flexible and decisive of all weapons—will hold world-power in the hollow of its hand." Nonsense, because it will hold it for precisely as long as no other nation or group of nations takes up the challenge. There might perhaps, in these days, be a lag of a week or two.

The question of how far to arm and how far to disarm, how far to trust to the best dreams of mankind and how far to insure against the worst is obviously a difficult one, but counsel ought not really to be darkened by imbecilities of this sort . . . But perhaps this is not the place to pursue this dreadful subject.

Imperial Standard Pica:	(QUICK BROWN FOX JUMPS OVER THE LAZY DOG quick brown fox jumps over the lazy dog £1234567890
Gayton (1st state):	(QUICK BROWN FOX JUMPS OVER THE LAZY DOG quick brown fox jumps over the lazy dog £1234567890
Gayton (2nd state):	(QUICK BROWN FOX JUMPS OVER THE LAZY DOG quick brown fox jumps over the lazy dog £1234567890

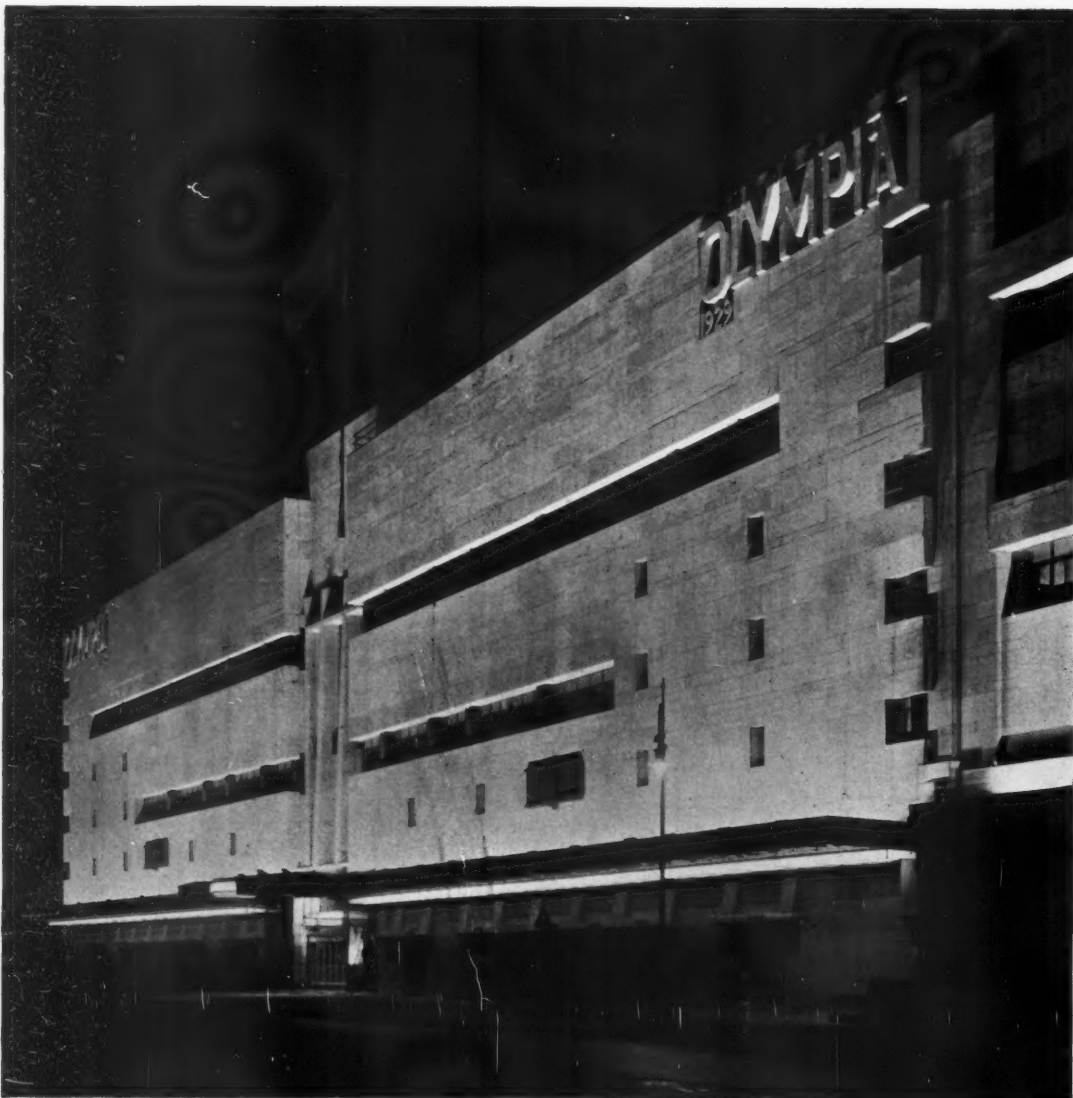
LIGHTING



THE ARCHITECTURAL REVIEW
DECORATION AND
CRAFTSMANSHIP
SUPPLEMENT

February 1934

The actor behind the scenes—the lamp. It is generally screened in architectural lighting behind a luminous or illuminated surface. When the lamp was designed its shape for architectural use was not an important consideration. Compare with illustration 5.



FLOODLIGHTING— WRONG AND RIGHT USES

2. The Singer motor car showrooms, London. An example where the lighting, while fulfilling illuminating requirements, does not succeed in building up an architectural design. The building disintegrates into several unrelated portions. 3. The tower of Westminster Cathedral, floodlit and showing how much the facing material contributes to the impressive effect—a fact worth consideration when designing a building or in the choice of a suitable subject for floodlighting. 4. The Olympia extension provides a very suitable subject for floodlighting owing to the boldness of its façade. It shows decision in the use of void and solid, thus giving character to the lighting effect.



5. Messrs. Heal and Sons new circular staircase, which is lighted with architectural tubular lamps. The picture shows how the lamp is now considered as a base unit and treatment varies accordingly. Architects: Smith and Brewer.

Architectural Lighting

By R. O. SUTHERLAND

ARCHITECTURAL lighting has been described as systems of lighting which utilise luminous or illuminated surfaces as the essential part of the design of buildings, and where the requisite lighting equipment is either built into or on to the structure as an integral part of it. Light is presented through the medium of a primary source—the lamp—and of a secondary source—a surface. This surface may be anywhere in the building interior or exterior, and it is here contended that the precincts of the premises, that is to say, its setting, is also included as well as its equipment, which includes furnishings, fittings and movable ornaments, which come within the term of applied art.

Applied Lighting

This, definitely expressed, includes the light "fitting." In the early developments of light in design, the fitting came in for a good deal of abuse, often with good reason. It is now realised that there are many instances where the use of an applied lighting unit is the right and proper architectural solution to a problem, particularly where the economic aspect is a primary consideration, and

the calculated light intensity on the plane of work is essential.

It is necessary to be careful in the use of a fitting. Standard patterns are often inclined to possess the defects likely to be found in any ready-to-wear article, and with the exception perhaps of the geometrical types which have the strongest claims to adaptability, they should not be adopted on the principle of least resistance. To ensure success the lighting fitting should be included in a design at its early conception, and the problem of its relation to the setting in daylight and at night should be solved by the working out of alternative treatments.

Compared with built-in features, the fitting has a certain abruptness, due partly to its character as a unit, and also to the attraction of its light, which draws the eye away from the surroundings.

Therefore, when a lighting fitting is to be selected from a showroom, it is necessary to have some idea of its principal characteristics in order that the unit which makes the best compromise is chosen, for it is seldom that all demands can be satisfied. The table on page 66 gives the characteristics of various lighting units, each unit type being

rated according to performance. The illustrations are only representative of various types of units. The encased diffusing fittings, for example, can be had in many other shapes, the best known being the sphere—which has strong architectural qualities when applied to a suitable setting.

Needless to say, the examples shown are based upon manufacture of good quality, when as much attention to the efficiency of the unit in its values of brightness, diffusion, absorption, has been paid as to the cost.

Incorporated Lighting

It is worth observing how there is a tendency to use the bulb or a cluster of bulbs for spot effects, while the gas discharge tubular lamp and architectural tubular lamp are made rather to express length and continuity either in luminous lines or in washes of lights on illuminated surfaces.

The latter practice is closely associated with those systems of lighting known as "built-in," and these forms convey impression more clearly than does the less apparent motives.

This harmony of lighting motives calls for a discriminating sense in the value of contrasts, and the claims of various architectural lighting fundamentals, such as Basic, Decorative, Concentrated and Fantastic have each to be weighed up or valued in a scheme, so that the atmosphere created is that best suited to the purpose of the room or the nature of its occupants. Psychological considerations are of importance, particularly as light has the power to influence emotion, and it is as well to remember that the human reaction ultimately decides as to whether a design is acceptable or not.

In this respect practical engineering aspects cannot be neglected, and if physiology is associated with the architectural impressions, most certainly psychology is closely related to illuminating engineering practice.

An example showing the method of calculation used in installing an architectural lighting feature is given on page 66, the system in this case being a lay-light.

Reference to the illustration, 7, shows an isolux diagram of a committee room illuminated by a laylight installed flush with the ceiling, the light sources being mounted above in silvered glass reflectors. The laylight is glazed with a figured rolled glass, giving fairly good diffusion, and the reflectors are installed to give even illumination on the upper surface of the glass. The floor area is roughly seven times as great as that of the skylight, and it will be seen from the isolux diagram that the horizontal illumination at a height of 2 ft. 6 in. has a maximum variation of about 4.5 to 1—i.e., from 37 foot-candles to 8 foot-candles, but that over the greater part of the room the variation does not exceed 1.75 to 1.

As is well known, the illumination from an extended source, similar in nature to the particular laylight under consideration, departs radically from the inverse square law, and, therefore, in-

LIGHTING UNIT		Relative Illumination on the		Freedom from Direct Glare	Freedom from Reflected Glare	Softness of Shadows	Maintenance	Favourable Appearance of Room.
		Horizontal Plane	Vertical Plane					
DIRECT (A) Open reflectors such as Standard Dispersive—with sprayed or opal lamps		Excellent	Good	Good	Good	Good	Excellent	Good
DIRECT (B) Reflectors with enclosing globe such as Industrial Diffusing Unit		Good	Good	Excellent	Good	Excellent	Good	Excellent
SEMI-DIRECT Enclosed fittings with major light flux downward		Good	Good	Good	Good	Excellent	Excellent	Excellent
GENERAL Enclosed Diffusing fittings		Good	Good	Good	Good	Excellent	Excellent	Excellent
SEMI-INDIRECT Enclosed fittings with major light flux upward		Good	Fair	Good	Good	Excellent	Good	Excellent
INDIRECT Indirect pendant fittings		Fair	Fair	Excellent	Excellent	Excellent	Fair	Good

6. Characteristics of lighting units.

volves considerable inaccuracy if the illumination design is based on point source laws.

Floodlighting

While interiors have received the almost undivided attention of both engineers and architects, the former in regard to lamp equipment and installation, the latter with regard to its place as a design factor, the treatment of exteriors has been almost entirely neglected.

The usual procedure for using light for exterior purposes is to instal floodlighting equipments which throw their efficient light on the faces of buildings irrespective of the fact that many façades are totally unsuited to receive such illumination. Sometimes the material may be wrong, or it may be the design that appears either flat and uninteresting, or disintegrated into apparently unrelated sections of too brilliant a contrast in light and shade.

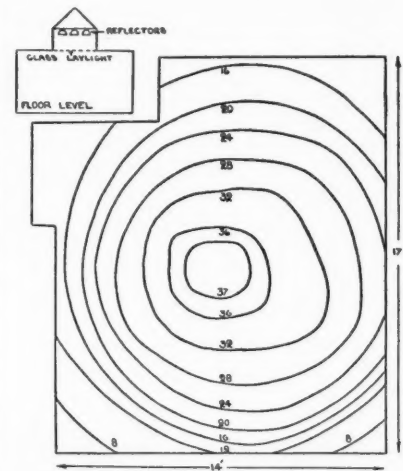
The architect should be advised

whether or not the client intends to floodlight his building, so that such factors as the positioning and screening of the lamps may have early consideration; that the direction of the light flux being known, the brightness of surfaces and intensities of shadows can be conceived and the effect of different surfaces studied, whether they be light or dark, reflecting or non-reflecting.

The use of colour in floodlighting is a matter of opinion. It would seem that if a building is satisfactory by day when the principles of harmony, contrast and discord have been successfully applied, it is dangerous to throw any additional colour upon it.

The facilities required for the installation of equipment in buildings is an important matter to architects when designing a façade to be floodlit. Suitable provision should be made for housing or screening, or treating the lighting units on lines of functional design.

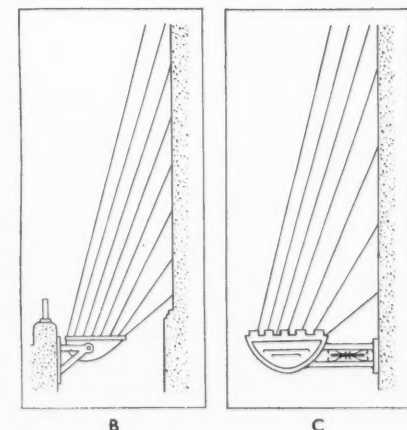
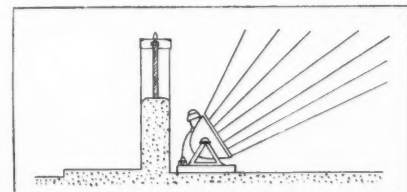
The practice of installing floodlight



7. Isolux diagram. This should be read similar to a contour map, the rings representing foot candle intensities on a plane 2 ft. 6 in. above the floor. The points of the rings are obtained by dividing the plan into squares and taking the foot candle reading in the centre of each square. It is of architectural interest in that it is a method of showing graphically the gradation of light on surfaces horizontal or vertical.

projectors on property opposite or adjacent to the site is to be deprecated, as each building should be so designed as to take its own equipment. For the same reason the erection or use of standards in a road is not recommended, although in existing buildings not designed for floodlighting, resort must sometimes be made to such devices as these.

There is the possibility of placing the units in a forecourt where wide angle projectors housing standard gasfilled



8. A. Mounting for projectors in a courtyard. B. Basement area mounting. C. Bracket mounting with concealed projectors.



9

9. A working studio in which indirect light provides a basic background while the centre daylight lamp dominates the setting and illustrates concentrated lighting where work has to be done, in this case painting.

Designer : Rodney Stone.

Craftsmen : The Army and Navy Stores.

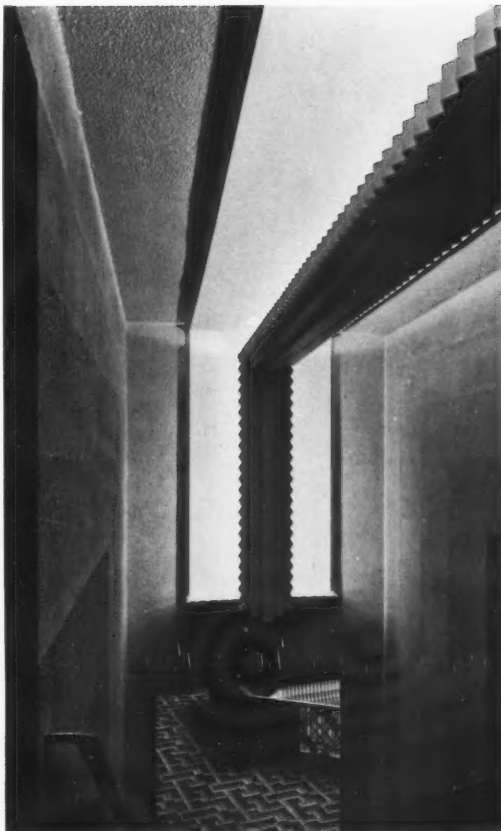
10. The staircase leading to the first balcony boxes of the Alhambra Theatre, Paris. A comparison to illustration 11, showing a feature suited to tubular lamp installation.

Joint Architects: Gray and Evans and Georges Gumpal.

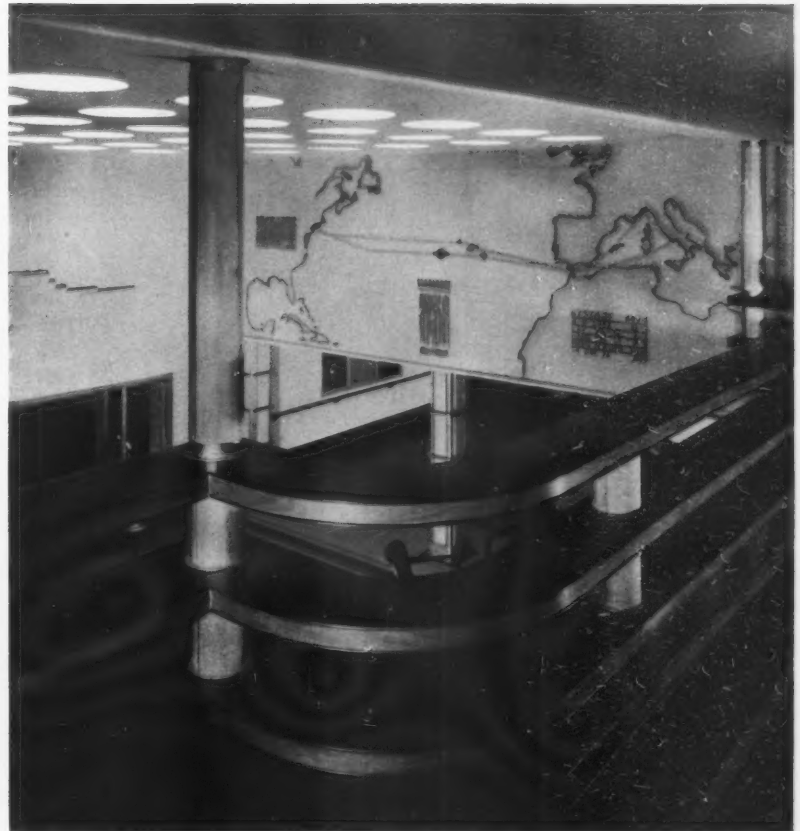
Craftsmen : Marc Henri and Laverdet.

11. The entrance hall on "C" deck of the Italian liner *Conte di Savoia*. A decorative treatment illustrating the spot motive to which obviously the bulb is more suited than in the adjoining illustration 10.

Architect : Gustave Pulitzer.



10

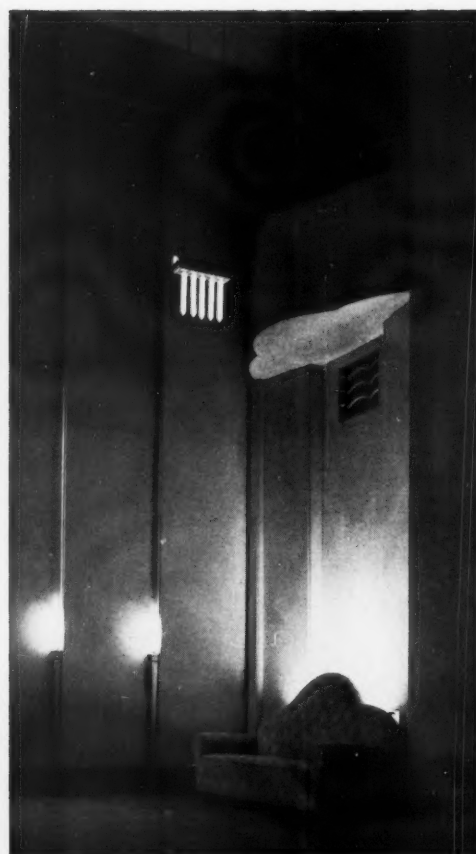


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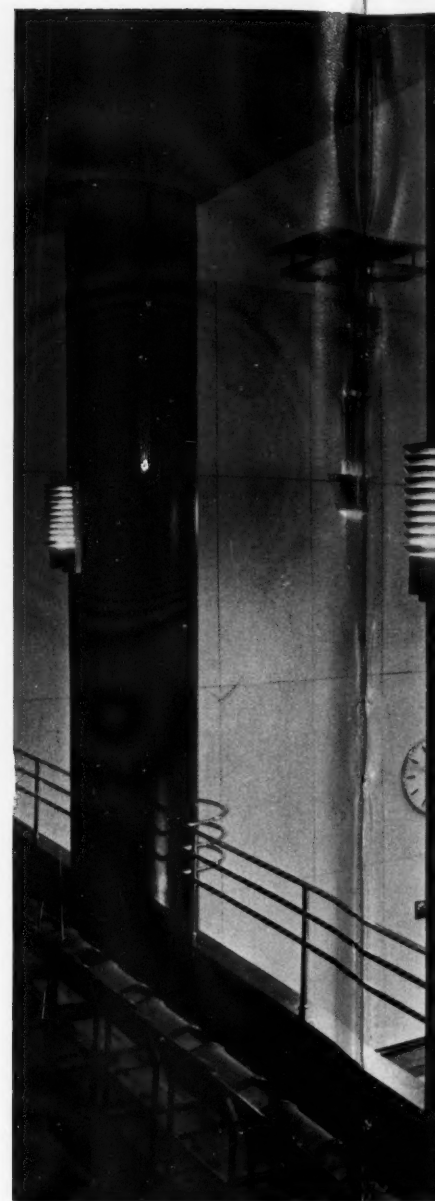
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12



13



14

12. A lighting treatment which makes full use of reflected surfaces and shows a fine sense of gradation in brightness contrasts. The end wall of Studio 2 at Broadcasting House, Cardiff, showing the Welsh dragon lighted from a hood and three of the torchères below. 13. An example of the combined effect of incorporated and applied lighting. The candle lamps provide a

useful accent in the design of the interior. The observation balcony in Studio 2 showing (a) the general lighting from behind one of the six settees, (b) two of the six torchères, (c) one of the four pendants formed of hanging tubular lamps with painted cresting. Reproduced by courtesy of the Tentest Fibre Board Company. Architect: Edward Maufe. Craftsmen: Troughton and Young.

14. Studio No. 1 at Broadcasting House, Leeds, seen from the gallery. The electric light pendants embody a standard commercial fitting with a 300 watt lamp which gives sufficient light in the studio to avoid the necessity of individual lighting to the music stands. In addition, each has six 40 watt lamps throwing light on to the ceiling. A contact sus-



15



16



pension gear, with winches in the false roof, allows the fittings to be lowered to the studio floor for cleaning and re-lamping. The fittings are all-metal except for the convex glass of the lamp, and are composed of streamline section tube. The illustration shows the use of the fitting in architectural lighting. The pendant imparts character to the Studio and symbolizes the electric and metallic curve in design. *Architect*: John C. Procter. *Civil Engineer*: M. T. Tudsbery. *Craftsmen*: Troughton and Young and Aeromet.

15. The showroom of Messrs. William Hollins and Co., at Nottingham, is lighted by lamps concealed in troughs forming caps to the stainless steel columns. An attractive example of shop lighting showing a successful treatment of the trough system. *Designers*: Betty Joel. *Craftsmen*: J. and S. Farr.

16. Fischer's Restaurant, London, where there are three combinations of lighting types. Basic in the

troughs around the columns and in the continuous luminous tubes, decorative in the flush circular panels—and a fantasy in the luminous serpent coiled along the ceiling.

Architect: Raymond McGrath. *Craftsmen*: Troughton and Young and Claude General Neon Lights. 17. A good example of basic lighting installed in a London office, showing even illumination without any attempt at elaborate decorative effects. The table lamp is a part of the furniture and furnishing not without architectural character. *Architects*: Yates, Cook and Darbyshire. *Craftsmen*: G. V. D. Illuminators.

18. A restricted view of the lighting in the Parlour of the Cumberland Hotel, London. An interesting example of decorative lighting, the features introduced being essential characteristics of the interior design. *Architect*: Oliver P. Bernard. *Craftsmen*: The General Electric Company.



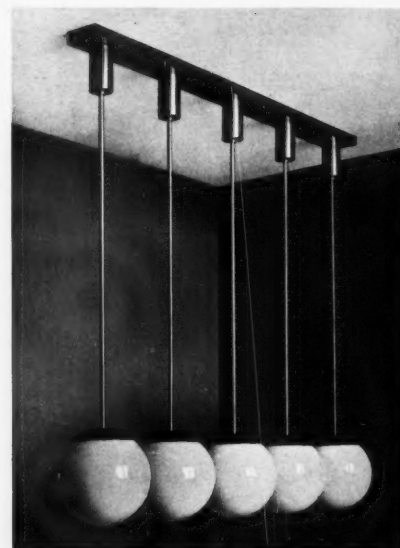
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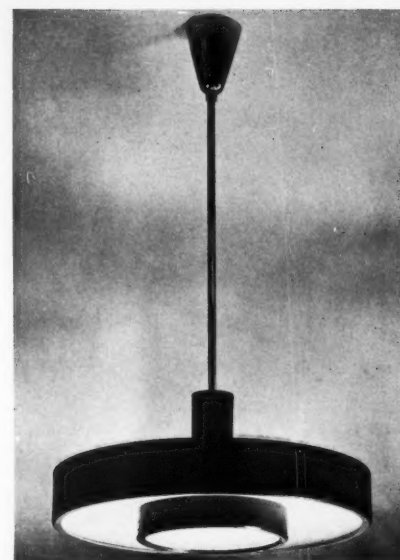
18



19



20



21

19 and 21. Ceiling and pendant fittings, the former combining reflected and direct light from a large matt surface reflector and a glazed base.

Designers and Craftsmen :

Troughton and Young.

20. A group of five lighting fittings made in six various sized globes from 6 in. to 16 in., using lamps of 25 500 watts and rods 35 in. to 85 in. The finish is in matt nickel chromium plated bronze, brushed copper or colour-sprayed. Architectural lighting principles find a

use for fittings of this description. *Designers and Craftsmen :* The Merchant Adventurers.

22. An illuminated display cabinet in a dining room—fulfilling utility as well as decorative requirements. Two 8½ in. tubular lamps, with standard striplite holders, are set behind the ground glass top and bottom.

Designer : Serge Chermayeff.

Craftsmen : Waring and Gillow.

23. An illustration of the use of the lamp in the furnishing equipment of a building. This shows

utility lighting and the possibilities of lamps in design. The trough fixed over the basin houses 11 in. tubular lamps in standard striplite fittings screwed to a special reflector formed of aluminium sheet.

Designer : Serge Chermayeff.

Craftsmen : Waring and Gillow.

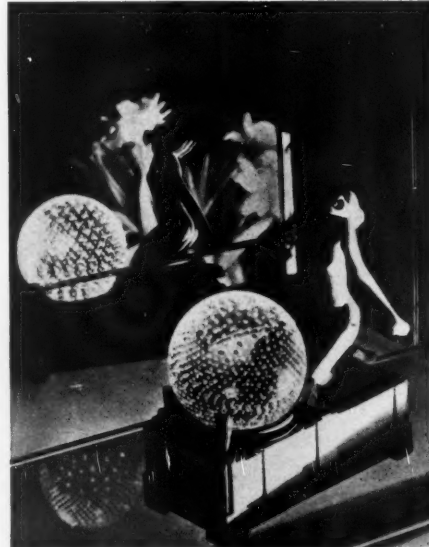
24. A continental example of the use of light in applied art. Divorced from its setting it loses much of its architectural value. A striking effect is achieved by placing this ornament against a mirror.



22



23



24

70



25



26

25. The Schocken store in Stuttgart. An impressive effect, resulting from the interior lighting acting as an exterior design factor. A form of treatment that might be used more extensively. Architect: Erich Mendelsohn.

26. This striking picture shows the tower of the headquarters of the Abbey Road Building Society, where clever lighting contrasts in light and shade combine to give character. The impression is conveyed that it is a pity that the same effects could not have been carried out for the whole building, so giving a complete composition. Architect: J.J. Joass.

27. The Garden of Remembrance, Broomfield Park, London. A group of landscape architectural features that have not received attractive lighting. The memorial, porch, pergola, pond, and fountain lend themselves to a composition built up of lighting contrasts with the memorial as the dominant.

28. "Night Gardening." The impression is given that the lighting is accidental, but this is not so. The effect was probably pre-designed and shows the possibilities in garden lighting when handled with sensitiveness. Architect: Oliver Hill.

amps can be employed. This system is as a rule applicable only to the flood-lighting of the whole façade. It should be noted that to ensure reasonably even illumination the projectors should be mounted at a distance from the building of approximately one-third the height to be illuminated.

Where a basement area of adequate size exists, lamps can be mounted on the retaining wall below pavement level, spacing being recommended in this case to avoid inequality of illumination.

Yet another arrangement is the use of the canopy where the local regulations make it permissible to include such a feature in the design. Trouble sometimes is here found in providing effective screening owing to some bye-laws fixing the depth of the valance at 2 ft., thereby preventing the projectors from being hidden from view.

Finally, there is the possibility of mounting the lamp on brackets, but as regulations vary in the matter of projections over streets, it is often necessary to have specially designed units for this type of installation. The best treatment in this case is the small projector, with which an interesting design can be built on an illuminated façade.

Design of Facades by Night

In the absence of any alternative to floodlighting, the facias of our buildings have been invaded by the great army of commercial signs—good and bad. If illuminated signs are required, they should be incorporated in conjunction with other factors, to present something like an architectural conception by night as well as by day.

It is a matter for regret that the expenditure lavished on excessive stone and plaster adornments on some buildings was not devoted to a refined lighting treatment of the elevations. No other vehicle can take the place of modern lighting, which

is so married to surfaces, either luminous or illuminated, that their treatment together calls for the best efforts of the architect, illuminating engineer and manufacturer, in design, installation and equipment.

Illumination in Landscape Architecture

Just as architectural lighting has come to be considered as an integral part of the design of buildings, so should illumination in landscape architecture be deliberately planned so that the effects may be intentional and not incidental.

This subject is so immense that it would be impossible to attempt anything in the nature of a comprehensive survey of its principles in the space available. It embraces the treatment of private gardens, large and small, public parks, amusement grounds, outdoor recreation centres, while in town planning the use of light can be strongly recommended in certain cases for the lighting of garden squares, bridges and embankments, and in respect of historical ruins which claim the interest of the public. Straight-forward floodlighting does not by any means suit all cases.



27



28

It is true that little has been done in this country so far in the design of apparatus for lighting gardens.

The systems used for architectural lighting in interiors are suitable in many cases for the lighting of architectural features such as pavilions, summer houses, arcades and pergolas, etc., while for the lighting of horticultural elements, equipment can generally be made up by manufacturers who, though well acquainted with the engineering aspects, have not had much scope in this particular application of lighting.

MATERIAL.	REFLECTION FACTOR. Per. Cent.
White tile, glossy	80
Portland stone	62
Light stone	58
Middle stone	37
Dark stone	33
Concrete, unpainted	45
Clean yellow brick	35
Clean red brick	25
White pine	61
Poplar	47
Plain deal	45
Red oak	32
Silvered glass	86
Aluminium paint	72
Stainless steel and chromium plate	60
Nickel	47
Cast iron, bright	28
Cast iron, dull	12
Galvanized iron or steel, unpainted	16
White paint, glossy	78
Plaster (cement finish)	75
Plaster board	60
Ivory, glossy	69
Ivory, matt	64
Paint, Eau de Nil	47
Paint, French Grey	36
Paint, Light Battleship Grey	31
Paint, Dark Battleship Grey	11
Paint, Post Office Red	17

As all lighting is by luminous or illuminated surfaces, and as the luminous surface is generally out of place in landscape illumination, it will be of interest to readers to have the above table giving values of the reflection qualities of different materials, and showing which are best suited to be included as a background to provide an illuminated surface

29. *The Grill at the Cumberland Hotel, London. The upper part of the columns, wall pilasters, and under side of beams are fitted with stainless steel troughs, arranged in groups of rectangular formation. These troughs conceal lighting channels illuminating sycamore flutes which act as reflectors. Lighting channels are fitted behind the crest of wainscoting. Throughout the room a circular ceiling trough carries a lighting channel which illuminates the upper ceiling. An excellent example of basic light with an interesting accent at the corners. Architect: Oliver Bernard.*



30. *Studio No. 4, Broadcasting House, Birmingham. An example where a lighting element is treated entirely on its merits and forms a dominant feature of the interior design. The lighting is in two troughs constructed of plywood on an aluminium frame suspended on polished aluminium rods. The troughs themselves are painted a pale blue full gloss to obtain high lights of what would otherwise be a completely shadowed surface. Each trough contains forty 100-watt lamps which are controlled on five different switches giving various combinations of lighting. The foot candle reading all over the studio floor area is approximately 4½. Architect: Serge Chermayeff.*

or secondary light source, where the lamp is concealed, and therefore unobtrusive.

Design in Industry

The lamp should have a definite place in the design of the equipment of a building. It is now a common practice to build in such features as book-cases, writing desks, settees, and also kitchen units of various kinds. All these demand good light. There is usually ample opportunity to incorporate a lighting unit as part and parcel of the design. It can be so housed as not to appear obtrusive, and can also be on an automatic adjustment to prevent waste arising from careless use. Often it is not an economic proposition to instal a powerful lamp in a room where special light is

desired only on occasions; a restful basic light with concentrated illumination, which may be direct or indirect, is the correct solution to such a problem.

Restrained illumination in glass sculpture which encloses the lamp in translucent materials is a device which is as yet in its early stages.

Design of Lamps

The lamp, or rather the bulb, has in previous years been developed with the sole object of providing an efficient light source. This has produced in turn the vacuum, clear gas filled, pearl and opal lamps.

All these forms originated when the design of bulbs was not thought to have much bearing on architectural design. It is now realized, however, that the lamp can take an important place in design. In future the lamp or vehicle of light is likely to be treated openly, without the cloak of enclosure, whether it is a fitting or an indirect lighting cove. Already we have such lamps as the gaseous discharge tube and the architectural tubular.

ANTHOLOGY

London in the Roaring 'Forties

What is most striking in London is its vastness. It is the illimitable feeling that gives it a special character. London is not grand. It possesses only one of the qualifications of a grand city, size; but it wants the equally important one, beauty. It is the union of these two qualities that produced the grand cities, the Romes, the Babylons, the hundred portals of the Pharaohs; multitudes and magnificence; the millions influenced by art. Grand cities are unknown since the beautiful has ceased to be the principle of invention. Paris, of modern capitals, has aspired to this character; but if Paris be a beautiful city, it certainly is not a grand one; its population is too limited, and, from the nature of their dwellings, they cover a comparatively small space. Constantinople is picturesque; nature has furnished a sublime site, but it has little architectural splendour, and you reach the environs with a fatal facility. London overpowers us with its vastness.

Place a Forum or an Acropolis in its centre, and the effect of the metropolitan mass, which now has neither head nor heart, instead of being stupefying, would be ennobling. Nothing more completely represents a nation than a public building. A Member of Parliament only represents at the most the united constituencies; but the Palace of the Sovereign, a National Gallery, or a Museum baptized with the name of the country, these are monuments to which all should be able to look up to with pride, and which should exercise an elevating influence upon the spirit of the humblest. What is their influence in London? Let us not criticize what all condemn. But how remedy the evil? What is wanted in architecture, as in so many things, is, a man. Shall we find a refuge in a Committee of Taste? Escape from the mediocrity of one to the mediocrity of many? We only multiply our feebleness, and aggravate our deficiencies. But one suggestion might be made. No profession in England has done its duty until it has furnished its victim. The pure administration of justice dates from the deposition of Macclesfield. Even our boasted navy never achieved a great victory until we shot an admiral. SUPPOSE AN ARCHITECT WERE HANGED? Terror has its inspiration as well as competition.

Though London is vast, it is very monotonous. All those new districts that have sprung up within the last half-century, the creatures of our commercial and colonial wealth, it is impossible to conceive anything more tame, more insipid, more uniform. Pancras is like Mary-le-bone. Mary-le-bone is like Paddington; all the

streets resemble each other, you must read the names of the squares before you venture to knock at a door. This amount of building capital ought to have produced a great city. What an opportunity for architecture suddenly summoned to furnish habitations for a population equal to that of the city of Bruxelles, and a population, too, of great wealth. Mary-le-bone ought to have produced a revolution in our domestic architecture. It did nothing. It was built by Act of Parliament. Parliament prescribed even a façade. It is Parliament to whom we are indebted for your Gloucester Places, and Baker Streets, and Harley Streets, and Wimpole Streets, and all those flat, dull, spiritless streets, resembling each other like a large family of plain children, with Portland Place and Portman Square for their respectable parents. The influence of our Parliamentary Government upon the fine arts is a subject worth pursuing. The power that produced Baker Street as a model for street architecture in its celebrated Building Act, is the power that prevented Whitehall from being completed, and which sold to foreigners all the pictures which the King of England had collected to civilize his people.

In our own days we have witnessed the rapid creation of a new metropolitan quarter, built solely for the aristocracy by an aristocrat. The Belgrave district is as monotonous as Mary-le-bone; and is so contrived as to be at the same time insipid and tawdry.

Where London becomes more interesting is Charing Cross. Looking to Northumberland House, and turning your back upon Trafalgar Square, the Strand is perhaps the finest street in Europe, blending the architecture of many periods; and its river ways are a peculiar feature and rich with associations. Fleet Street, with its Temple, is not unworthy of being contiguous to the Strand. The fire of London has deprived us of the delight of a real old quarter of the city; but some bits remain, and everywhere there is a stirring multitude, and a great crush and crash of carts and wains. The Inns of Court, and the quarters in the vicinity of the port, Thames Street, Tower Hill, Billingsgate, Wapping, Rotherhithe, are the best parts of London; they are full of character; the buildings bear a nearer relation to what the people are doing than in the more polished quarters.

The old merchants of the times of the first Georges were a fine race. They knew their position, and built up to it. While the territorial aristocracy, pulling down their family hotels, were raising vulgar streets and squares upon their site, and occupying themselves one of the new tenements, the old merchants filled the straggling lanes, which connected the Royal Exchange with the port of London, with mansions which, if not exactly equal to the palaces of stately Venice, might at least vie with many of the hotels of old Paris. Some of these, though the great majority have been broken up into chambers and counting-houses, still remain intact.

BENJAMIN DISRAELI,
FIRST EARL OF BEACONSFIELD,

TANCRED (1847).

MARGINALIA

PAINT

According to the *Evening Standard*, St. Ethelburga's, Bishopsgate, is having its clock "reconditioned with a blue dial." It is curious how unmentionably vulgar the verb to paint has become. "Refeened" people used to talk about redecorating (which in so far as it implies anything definite, seems to suggest new plaster work), but redecorating has apparently been ousted by this deplorable Americanism. Perhaps the repainting of St. Ethelburga's clock—for that is what this statement amounts to in plain English—has been in response to the appeal to help unemployment by having painting done during the winter. This appeal deserves the widest support, for the greater rapidity of modern methods overcomes much of the old inconvenience of "having the painters in," that used to be such a bug-bear for housewives.

—PRESTIGE

It is all to the good that the nation is returning to "paint-consciousness." Paint is a very fine thing if properly applied, and its peculiarly English uses (such as the "Post Office scarlet" of pillar-boxes) are part of our national tradition. So it seems all the greater pity that our railways have lost most of their old pride in spick and spanness. English engines used to be well-groomed and glossy-coated as thoroughbreds. Nowadays they more often look as blistered and blackened as those grimy and rusty contraptions that haul Continental trains which used to awaken our condescending pity. Thanks to grouping, there are only five different "liveries" left: three greens, the crudely plebeian crimson lake of the L.M.S., and that universal sooty black, originally confined to goods engines, which has spread to most classes of passenger locomotives as well. Not that there is anything wrong with the right sort of black. One has only to think of the old

L. & N.W. locomotives, which glistened like ripe blackberries. The great—no, the greatest—English architects of the last half of the nineteenth century and the first decade of the twentieth, those little-known men whose official title was "chief locomotive superintendents," had as good an eye for colour as for form. They knew how to make each set off the other to the best possible advantage. (What could have been subtler than the delicate lining of the old North-Eastern green, unless it were the curve of North-Eastern domes and funnel-rims?)

Those who never saw that master-piece, J. F. Mackintosh's "Cardean" (1908), resplendent in Caledonian blue, "spoilt" (as yachsmen say) by the royal arms of Scotland, can never realize what they missed. In Midland-red, she looks like a charwoman who has seen better days. The old L. & N.W. and "Caley" were national railways in the best sense of the word; the Midland merely a provincial undertaking, with headquarters

in Derby. Yet for some inscrutable reason when these three systems were fused into one under that lumbering title, the London, Midland and Scottish, the senior partners allowed Midland livery and Midland line to be imposed upon them. This was rightly regarded as nothing less than a minor national catastrophe, and one which British railway prestige would take a long time to live down.

The deep chocolate lower, and white upper panels picked out in yellow and gold, of the L. & N.W. and the "Caley" was the most aristocratic livery railway carriages have ever had. There may be something to be said for dusty all-crimson carriages, but nothing for discoloured all-crimson locomotives (try and imagine an all-crimson liner?) That a different red, whether alone or with cream upper panels, has a fine appearance is shown by London Transport. The (ex G.N.R.) plain teak of the L.N.E.R. had much to recommend it as long as carriages were made of wood. Today when they are, or ought to be, of all-steel construction, this particular finish proclaims either a silly sham or—*vide* the recent Lagny disaster in France—a criminally dangerous survival of obsolete methods. On the whole the Southern comes out best, as it does in most other ways, with engines and carriages in a uniform dark green, picked out in black and yellow.

The form of the new L.M.S. locomotives was as crude as the colour that clothed them, as can be seen in the much trumpeted "Royal Scots," whose pimply domes and funnels are out of all proportion to their boiler barrels. Worse still are their hideously squared sides. It is welcome news, therefore, that in the new "Princess Royal" pacific—as neat and English a design as you could want—a return has been made to our best traditions in locomotive design. But beautiful as the "Princess Royal" undoubtedly is, she looks a village belle outrageously dressed in that gaudy crimson plush. Let us hope this tardy return to grace on the part of the worst offender of the Big Four will stimulate paint-manufacturers to keep our railway directors inspired with a proper respect for spit and polish.

—AND PUBLIC PATRONAGE

It is not merely by a display of inappropriate, or inappropriately dirty paint that two, if not three, of the Big Four are steadily losing prestige. There is also the little matter of stations. For as Mr. W. V. Wood, the Chairman of the Railway General Managers Conference, cheerfully admitted "not much" of the bagatelle of £200,000,000 spent by our railways on re-equipment (or was it "reconditioning?") since the war has been wasted on modernizing stations. And "rightly" so in Mr. Wood's opinion. After all it is only the public that uses them. Directors and managers have their private cars. If the public are dissatisfied, let them go by road.

The railways of France, Germany, Italy, Switzerland and the United States

CAMBRIDGE



Still the most beautiful University City

OFFENDS

(CONTINUED FROM
LAST MONTH)



Cambridge was once a decent East Anglian town, with pleasant eighteenth century streets (now out of repair)—

the last century experimented in a style that could hardly be called East Anglian. Houses were made to look older (1890)

CAMBRIDGE OFFENDS (CONCLUDED)



—and older (1930)



—and still older (1933)



in the forward march of civilization down the highroad to SUCCESS (not Academic)

are finding it necessary to embark on extensive programmes of station rebuilding in the interests of traffic and economy in operation. Our own deny work to unemployed builders on the assumption that the sort of shelter no longer quite good enough for Chinese coolies will be quite good enough for the p.b. British public for a long time to come. The cost of a metal shanty (or a new station, to give it its courtesy title) recently opened on the L.M.S.'s London suburban lines was apparently calculated on the basis of the total outlay being recouped from tickets issued during the first week it was in use.

Once again it is the Southern that makes the best showing—i.e., Wimbledon and the other new suburban stations. Work has just started on the reconstruction of Southampton (West), which will cost £178,000. According to the company's *communiqué* which appeared in the press:

"a new note in British station architecture will be struck in the design of the buildings on the down side, which together with the roofing and footbridge will be of concrete, the whole being planned as an architectural unit in accordance with the latest Continental station construction."

It is instructive to be officially assured that stations planned as units (the qualification "architectural" is redundant, being implied in "planned as units") are a novelty as far as this country is concerned. Certainly the average fairly important English station lends colour to that belief. Still there are exceptions, which are mostly also exceptional in having been designed by qualified architects. Another humiliating reflection prompted by this gem of commercial candour is that we used to be told that British railways were a standing exemplar to those of other nations.

Isn't it about time the railways realized the publicity value of employing architects, instead of hole-and-corner departments of their own, to design important stations, for it is the business of architects, as it clearly isn't of railway managers, to know what the public needs. (True, one of them did let an architect build a small hotel last year. But hotels are used by the few, not the many.) Has it ever dawned on railway directors why the Underground is popular, and the main-line companies are not?

Pe Olde Neon

West Kirby isn't quite in Lancashire but it feels pretty confident that what it builds today West Kilburn will build tomorrow. The architect of its "new" Tudor Cinema, opened last month, has "worked for harmony with surrounding buildings" in that famous Elizabethan suburb of Liverpool. We are indebted to *Cinema Construction* for the following description. Only the italics are ours.

Externally the structure represents the Tudor period in English architecture; a half-timbered gable surmounts a well-proportioned oriel window with decorative panels underneath. Above the window the name

of the theatre is built up in old English lettering, finished in red and superimposed with Neon tubing. The only other illumination on the frontage is supplied by two antique-type circular lanterns with leaded glass.

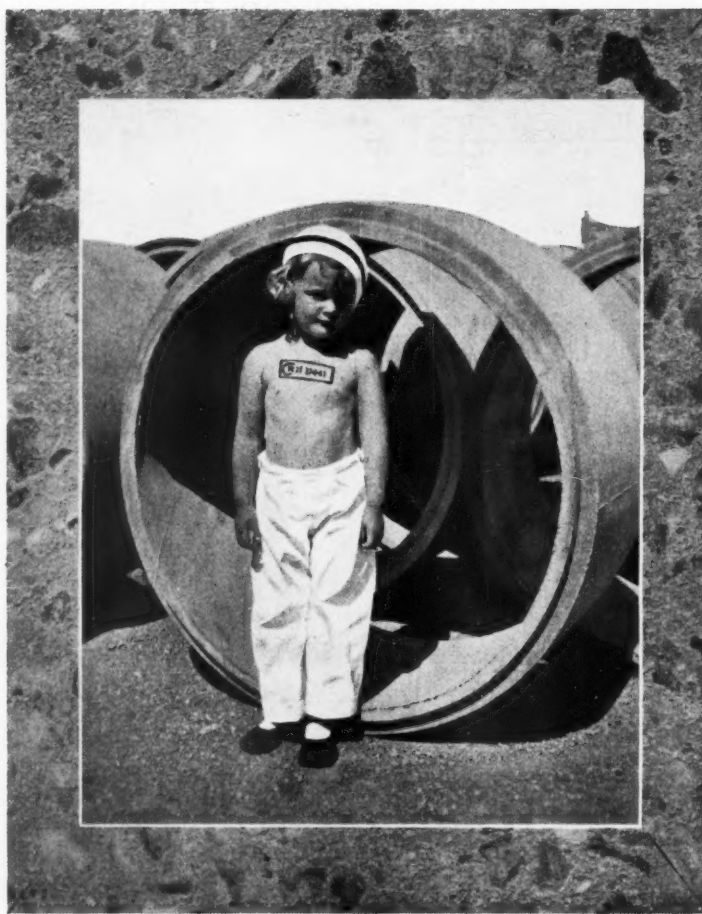
The interior, although designed on modern lines, does not clash with the period treatment of the exterior. The decorations are in quiet tones, part of the walls being rough-cast and fading from tangerine at the base to ivory at the ceiling. The main walls carry a touch of ornamentation in the form of large blue and silver frames, inside which the colours of the plastic paint, mainly tangerine and green, have been rubbed to bring out the shading.

The seating is upholstered in moquette of futuristic design.

Perhaps in West Kirby's next cinema the "successful blending of the old and the new" will take the form of a futuristic exterior tastefully harmonized with Tudor bench seating, Neon rush lights, and an automatically resanded floor. That, we believe, has not yet been tried. It should prove quite the biggest draw on Merseyside.

BRIGHTER STEEPLES IN FRANCE

The monumental figures which crown the spire of the new church at Villemonble (Seine), Paul Tournon, S.A.D.G., architect, cover 18 metres of its height on all four sides. They were carved in concrete by M. Carlo Sarrabezolles only twelve hours after pouring. It is claimed that this "modernesque" sculptural technique is as simple as it is cheap. All that is required is a reduplication of the exterior form-work of the structure fixed so as to leave an interval of about 12 centimetres between inner and outer shells. Both shutterings are of the usual wooden box type, and are not in any



way shaped to the intended sculptural design. An extra skin of concrete is poured into this cavity, which is allowed only 12 hours to harden before the outer shell is struck (the inner is kept in position for several weeks longer). The sculptural design is then rapidly carved while the raw "green" concrete is still of the consistency of hard cheese, care being taken that the undercutting does not penetrate more than 6 centimetres beneath the surface. The architect of Villemonble church believes that this structural imprisonment of embryo sculptural forms inside a geometric straight jacket of concrete shuttering will lead to a natural fusion of sculpture and architecture as in the most memorable epochs of antiquity. Perhaps. But as neither of these arts is at present in a very flourishing state, the immediate prospects opened up by the new process are even more alarming than the photograph suggests.

CORRESPONDENCE

The Editor,

THE ARCHITECTURAL REVIEW.

SIR.—Re your January issue. A fellow Rotarian has shown me copy of same containing a whole-page photo (Plate iv) of some cast-stone sewer-sections (we don't say concrete no more, it sounds a bit old-fashioned and Simple Simon-like). There was nothing to say whose ad. it was

and all. Anyhow that photo was no more modern art-advertising than my hat. And it might do the cast-stone trade a deal of harm with the better-class public, especially in fancies. That's why I'm writing you. There's no sales magnetism in that sort of puzzle stuff, and I ought to know after ten years in high-class precast ornaments for gladdening up gardens. Mind you, I'm no enemy of art as long as it's a straight business proposition. And I'll go so far as to say cast-stone can stand up to super art effects as well as any other choice manufacturing line you care to mention if the artist has a bit of an eye for something fetching. What you want is colourful contrast. Take a dainty little miss, all golden curls and sweet innocence, looking as if butter wouldn't melt in her mouth; tog her up in a natty boy's sailor suit, and pose her against those self-same 4 ft. sections (only a bit neater arranged like), and the trick's done—which I think you will candidly admit as per enclosed, which you are at full liberty to reproduce in your esteemed. And your readers can't say it isn't art, *because it's real Swedish*.—Your obedient servant,

WILFRED H. LOATHLY,

Managing Director, Art-Con Products, Ltd. (Manufacturers of the well-known "Concart Novelties," "Peter Pan Rusticalities," etc.)

Peacehaven Parva.



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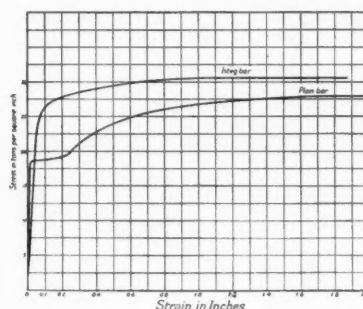
An Advance in Reinforced Concrete

It has long been realized that an ordinary round bar is not the last word in reinforcement for concrete. Many experiments were carried out extending over a period of years with deformed bars of various sections, but little real progress was made until the well-known fact that "ordinary grades of steel, when worked cold, are increased in tensile strength," was applied to the problem. About sixteen years ago a lecture on experiments and tests on mild steel bars was given before the Society of Engineers. Square bars, which were found most suitable for the case, were twisted about their own longitudinal axis, resulting however in a lack of uniform development, being zero at the centre on the axis, and a maximum at the extreme fibres. This inequality of development is avoided in the "Isteg" process, which has been produced by research and experiment in Central Europe. Briefly, the system consists of two round mild steel bars placed side by side and stretched by being twisted together, to a pre-determined point beyond the yield point of the component bars, the resulting twin bar, what-

ever the yield points of the component bars may have been, will have a regular stress strain diagram giving a yield point (taken at 0.2 per cent. permanent elongation) of a minimum of 58,500 lb. per square inch.* A most important point to note in this process is that the twin bars have as their axis of rotation, the line at which they make contact throughout their whole length, thus developing the entire cross-section of each bar.

The twisting takes place between two fixed headstocks, with the result that the overall length of the bars is the same after twisting as before and the cross-section is of the same area, though slightly altered in shape. The pitch of the spiral (arrived at after exhaustive experiments) is between 10 to 15 times the diameter of the material. The twisting process automatically removes all scale from the bars, which advantage, together with that resulting from the shape of the section, greatly increases the bond stress, and has a most important bearing upon the problem of cracks, tests proving

* Professor S. M. Dixon, at City and Guilds Engineering College.



Comparative stress-strain diagram, "Isteg" and plain bars.



A two-strand bar showing flexibility in bending.



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A.R.1



that cracks in beams reinforced by "Isteg" are numerous, narrow and well distributed, against the few but wide and dangerous ones produced in beams reinforced with ordinary round bars.

A most valuable service is rendered by the individual testing of each bar twisted, for only sound bars can withstand the stretching and twisting, which amounts to at least twice the stress required in the finished structure.

Tests with British steel have been carried out here on typical beams and on special sections (proposed by Dr. Oscar Faber, in which the cross-section of concrete does not exceed ten times that of the steel) by Mr. Harry Stangar, at Westminster, and by Professor S. M. Dixon, at the City and Guilds Engineering College, with excellent results.

Official approval of increased stresses has been granted in Germany (State of Prussia) and Czecho-Slovakia, of 25,500 lbs./sq. in., and in Austria (Vienna), 24,000 lbs./sq. in. with, in this case, an increased concrete stress of 15 per cent.

A lecture given before the Institution of Structural Engineers in December by Dr. Fritz Emperger, the distinguished Austrian engineer, on the "Application of High Grade Steel in Reinforced Concrete," dealt with "Isteg," and was enthusiastically received,

being supported by Mr. Leo Kauf (Vienna), Dr. Oscar Faber, Professor S. M. Dixon, Dr. N. H. Glanville, and others. The L.C.C. building regulations are in course of revision and as arrangements have been made for thorough tests by the Building Research Committee, a better state of things in the world of concrete may be hoped for before long.

WALTER GOODESMITH

TRADE ANNOUNCEMENTS

An interesting Amalgamation

In last December's issue a brief announcement was published of the incorporation of Messrs. Barker, Young & Co., Ltd., Messrs. Young, Osmond and Young, Ltd., and Messrs. Electro-Gas Development Co., Ltd., under the new title of Messrs. Unity Heating, Ltd. This month the opportunity is taken of tracing the development of this new form of heating.

In 1925 Messrs. Young, Osmond and Young, Ltd., were a small firm of electrical and general engineers. During that year their directors became interested in a new electrical device known as a tubular electric heater which was patented by Mr. Lightfoot of Manchester. This new heater involved the minimum loss of heat to the fabric of a building and provided a low operating temperature, coupled with the ability to produce rapid temperature rises in either a room or building. The

directors realized the great possibilities for this form of heater and manufacture was almost immediately commenced under Mr. Lightfoot's patent. A ready sale resulted in a field which, at that time, was completely dominated by solid, liquid or gas-fired central heating plant.

During the next two years the design of the heater was greatly improved and further patents were taken out, the heater becoming known as the Unity Tubular electric heater.

* * *

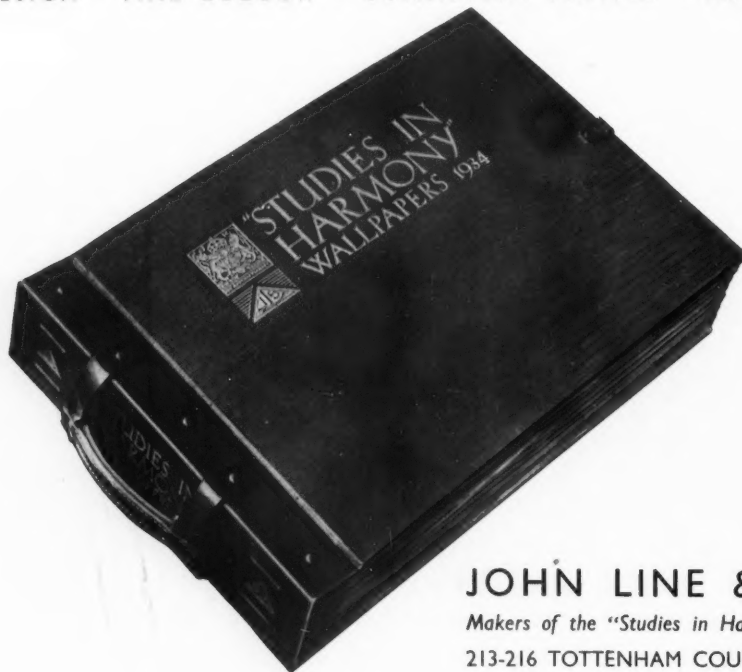
Progress was, however, difficult, due partly to the scepticism of those used to employing central heating by hot water and partly to the electricity tariffs then generally obtaining. At this point a great technical advance appeared with the first Unity Thermostat. It had always been recognized that thermostatic control, room by room, should be a normal part of practically every electric heating installation, and this now became possible.

During the 1929-1930 season the output increased enormously as the installation of Unity Heating in schools, sizeable office buildings, places of amusement and private houses, etc., became more general.

* * *

At about this time the Morgan Crucible Co., Ltd., were developing their ceramic type of medium temperature panel radiator embodying a graphite resistor. Whilst it had some disad-

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vantages as compared with the Unity Tubular Heater for many types of building, it also had advantages over the Unity Tubular Heater which were of particular importance to highly ventilated enclosures such as open-air schools.

Shortly afterwards the Electro-Gas Development Co., Ltd., placed their Electrorad Low Temperature Type Panel Radiator on the market; this again had certain advantages and disadvantages as compared with the Morganite and the Unity Systems.

* * *

In 1931 arrangements were concluded whereby Messrs. Barker, Young & Co., Ltd., was formed to handle both technically and commercially the sale of Unity, Morganite and Electrorad products. The formation of this company represented in itself a considerable advance in the technique of the automatic electric heating of buildings due to the fact that it was now possible, as it had not been previously, for the company to put forward that type of heating apparatus and thermostatic control gear which was most suited to the thermal and other characteristics of buildings under consideration.

* * *

During the last two years low temperature electric heating has continued to develop steadily and is becoming accepted more and more readily by the public and by architects as the heating of the present and of the future.

Buildings containing 200, 300, 500 and even 1,000 kW of Unity heating are by no means uncommon today; a few years ago, if the building contained as much as 100 kW of low temperature automatic electric heating, it created a good deal of surprise and speculation.

The change of name from Barker, Young & Co., Ltd., to Unity Heating, Ltd., marks one further logical step forward in the development of automatic electric low temperature heating.

Glass

There is one point of importance about armourplate glass, and that is that since it is manufactured from single sheets of ordinary polished plate glass, without any introduction of an organic interlayer, no discoloration takes place after years of use or when it is subjected to severe changes of temperature. When it breaks it does so into innumerable small pieces, which are neither large enough nor sharp enough to cause serious injury; in fact, the fragments can be crumbled between the fingers. It has all the qualities of the ordinary polished plate glass, such as transparency, lustre, and good vision and an added strength as well. For example, in some ships armourplate glass 1 inch thick has been used to replace ordinary glass 1½ inches thick, and a piece of the former glass ½ inch thick will withstand pressure at least four times as great as that required to break ordinary plate glass 1 inch thick.

An illustrated booklet has just been published by Messrs. Pilkington Brothers, Ltd., describing this production and the various tests that have been made to prove its strength.

The Westminster Bank

The directors of the Westminster Bank announce the retirement of Mr. E. F. Robinson, a joint general manager of the bank, after forty-four years' valued service. They have appointed as his successor Mr. W. T. Ford, at present an assistant general manager.

* * *

Mr. A. W. Bentley, the manager of the Lombard Street Office, has been appointed an assistant general manager. Mr. T. H. R. Lawman, at present deputy manager at the Lombard Street Office, becomes manager at the Lombard Street Office.

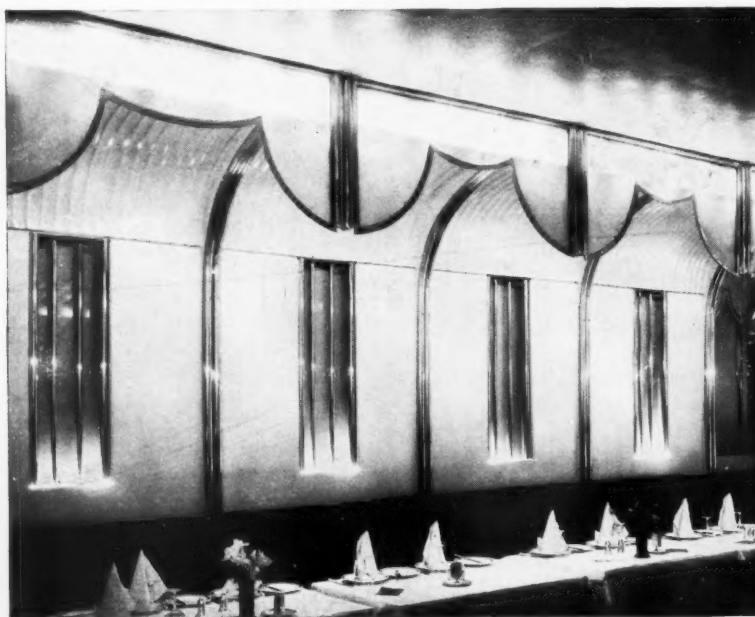
Rubber Flooring

We have received from the India-Rubber, Gutta Percha and Telegraph Works, Ltd., of Aldwych House, London, W.C.2, a copy of their new brochure containing illustrations, some of which are in colour, of the interiors of banks, municipal and office buildings, churches, chapels, public baths, private residences, etc., in which Silvertown rubber floors have been laid. Specially interesting features of the brochure are the chart, reproduced in colour, of the range of standard colours available for rubber floors, and the illustration of the use of inlaid rubber for the panelling of walls.

The decorative possibilities of Electrically Welded Steel Tubing

THE photograph shows the novel and most effective decoration scheme at Quaglin's Grill Room, which was produced with chromium-plated Steel Tubes and Neon Lighting.

The work was carried out almost entirely in Tube Products Electrically Welded Steel Tube, fabricated and erected by J. M. Pirie & Co. (London) Ltd., and Cox & Co., Ltd., London, to the design of Mr. Joseph A. Nerini.



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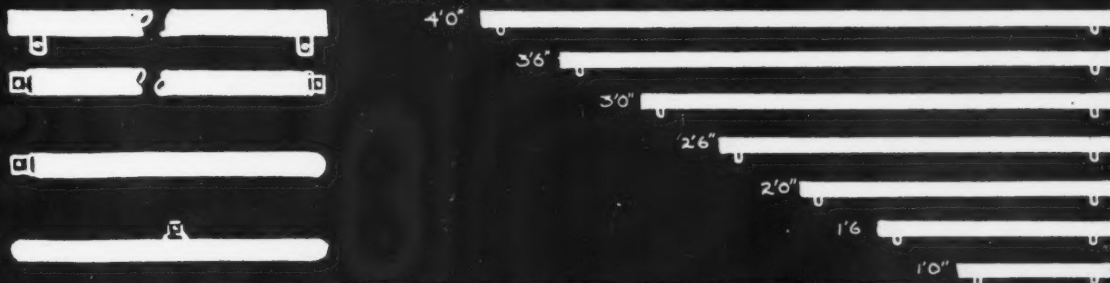
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Architects who are interested in the brochure should apply for a copy to the India-Rubber, Gutta Percha and Telegraph Works, Ltd. at the address given.

Concerning Coal

The Coal Utilization Council was formed in the early part of last year by the joint action of the national organizations of colliery owners, coal distributors and exporters. For the first time in the history of the industry all these sections have combined for the purpose of furthering the main interest of all—namely, the greater consumption of coal. But as its name implies, the Council recognized from the first that there are very many different ways of “utilizing” coal.

The first task undertaken by the Council was an extensive survey of the market with the object of discovering who bought what classes of fuel, and why. In the course of these investigations the opinions of many architects were obtained on such questions as the comparative value of different fuels for comfort, health and economy; the design of flues and chimneys; and generally upon the needs and problems of fuel consumers as seen from the point of view of those who plan and build their houses.

The main object of the Coal Utilization Council may be summed up in a sentence: to convince the consumer that coal will

give him the best possible heat value for the money that he spends on fuel. The public is not merely to be urged to “burn more coal” but assisted and informed as to the best method of utilizing that coal.

It was, therefore, very soon realized that the close co-operation of the coal-burning appliance makers must be sought, since it is no advertisement for the finest fuel to have it burnt in some old-fashioned grate, or range, or furnace. This co-operation was readily accorded through the recently formed Coal-burning Appliance Makers' Association. The Council's own technical department also takes the keenest interest in appliances for the better burning of coal and is constantly examining such accessories as mechanical stokers, boilers, coal boxes, water heaters, labour-saving grates and so on. A fund of reliable information on appliances which use coal or its derivatives is thus at the service of architects and of the general public.

The Council is naturally interested in the question of smoke abatement. While firmly convinced that the instinct of the public in favour of the coal fire is sound, it believes that all the benefits and comfort of the coal fire may be retained and smoke at the same time much reduced, either by the extension of the use of smokeless fuels, by further improvement in the design of appliances, or by

the application of some device to existing grates that will render the burning of bituminous coal practically smokeless.

But in addition to ascertaining the best methods of utilizing coal in its raw state and for already recognized purposes, the Council will seek to discover new purposes for its use and new methods of treating it for its conversion into either oil, smokeless fuel, gas for the propulsion of road vehicles, or for other purposes. This section of the Council's work will involve close co-operation with other bodies such as the Department of Scientific and Industrial Research and the Fuel Research Board. The Council has already been assured of the help and goodwill of the Department and it hopes to act as a connecting link between the scientists on the one hand and the industry and consumer on the other. Already there is a considerable number of publications issued by the Department and by other scientific bodies, containing the results so far achieved, which are by no means as widely known as they should be.

The objects of the Coal Utilization Council, therefore, are to obtain information by investigation and research and then to inform the public of the advantages of British coal. The Council is determined to ensure that no order goes to the competitors of coal by default of arguments on its behalf. With this end

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The horizontal line has become the guiding line of the modern designer. Throughout architecture there is a tendency to eliminate superfluous vertical lines and utilise only essential horizontals. This movement gives more light and beauty inside the building, and pleasing symmetry to the outside. Reliance Metal Windows are supporting this movement with Horizontal Bar Type Windows—both Standard Units and Purpose Built. Williams & Williams have *representatives* in every part of Great Britain, who will be pleased to call and discuss this new departure, or a *folder* showing the complete range of Standard Horizontal Bar Type Units, which has just been published, will be sent on application. The Horizontal Bar, however, is only one of the many types of Reliance Metal Window that is giving more light and beauty to architecture, and Williams & Williams will, on application, send a copy of the general *catalogue* showing a wide range of types of Reliance Metal Windows.

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in view it is proposing to organize a series lectures and courses in sales training so that the coal salesman may be an expert in all problems connected with fuel.

Stic B

Stic B, the material chosen for the rendering to the chimneys of the Battersea Power Station, illustrated on pages 50 and 51 of this issue, is a decorative, protective, damp proof and fire-resisting stone covering suitable for application to almost any type of surface including concrete, cement, plaster and brick.

A new brochure giving particulars of the material has recently been issued. It contains an abridged report on tests carried out by the Department of Scientific and Industrial Research on Stic B as a water-proofing treatment for brick, cement mortar and concrete surfaces; details of the properties and methods of application, and samples of the covering applied in twelve standard colours.

It is claimed the covering may be applied over drying surfaces without danger of its peeling, since moisture is able to escape slowly outwards through it, but no damp is able to penetrate the reverse way into the material to which it is applied. It is further stated that alkalis, always present in cement and plaster renderings, and liable to cause saponification and disintegration of an oil base, have no deleterious effect on

Stic B, if this is properly applied. It has qualities of elasticity and will seal the hair cracks that form in cement surfaces.

Architects who are interested in this material can obtain information from Stic B Paint Sales, Ltd., 32-33, Hamsell Street, E.C.1.

The New Stone Age

"Since building first began each civilization has been known by the tools it used. It is a far cry from the Iron Age to the Age of Steam, from the Bronze Age to the Age of Steel. But to-day even steel itself is not enough. It cannot rule alone. It must give its strength to our buildings, but in a way less cumbersome, more elastic, more suited to our modern needs. This is the Age of Concrete—the new 'Stone Age' of beauty, economy and speed in building."

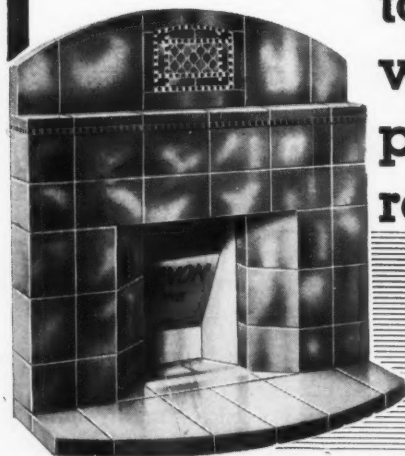
This quotation is taken from the introduction to an attractive brochure recently published by Messrs. F. Bradford and Co., Ltd., reinforced concrete engineers. It tells of forty years' specialization in an industry too often regarded as entirely new, of invaluable experience won in forty years of pioneering, of great and increasing success based on forty years' solid achievement. It points the way to safety in every matter connected with reinforced concrete construction. It portrays an organization versed in every phase of reinforced concrete engineering—the construction of factories, hotels, public

buildings, blocks of flats and offices, as well as water towers, coal bunkers, rafts, silos, retaining walls, and similar types of constructional engineering.

Copies of the brochure can be obtained from Messrs. Bradford, whose address is Coopersale Road, Homerton, E.9.

The general contractors for the block of flats at 43, Lowndes Square, S.W.1, designed by Messrs. Joseph, were Messrs. Higgs and Hill, Ltd. Among the artists, craftsmen and sub-contractors were the following: H. Sabey & Co., Ltd. (demolition), Ragusa Asphalte Paving Co., Ltd. (dampcourses), London Brick and Forders, Ltd. (bricks and partitions), Tuckers Ltd. (bricks), South Western Stone Company (stone), Shaws Glazed Brick Company (faience cills and copings) Dorman Long & Co., Ltd. (structural steel), A. Goldstein & Co. (glass), Horsley Smith & Co. (wood flooring), Caxton Floors (patent flooring), J. H. Nicholson (central heating, boilers), Bratt Colbran (stoves), Gas, Light and Coke Company (gas fixtures), F. H. Wheeler (electric wiring, bells), Plumbing Guild (plumbing), Bouldings and Froy's (sanitary fittings), N. F. Ramsay & Co., Ltd. (door furniture, window furniture, metalwork), General Post Office (telephones), Educational Supply Company (folding gates), F. A. Norris (iron staircases), Plastering Ltd. (plaster), Rippers (joinery), Carter & Co., Ltd. (tiles), Waygood-Otis (lifts).

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